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ABSTRACT

The publication is the third of a series of four volumes on educational innovation and deals with change at the school level. Case studies are presented on deliberate educational innovations in five secondary schools: Contesthorpe College, United Kindgom; the Experimental Gymnasium, Norway; Thornlea School, Canada; Rodovre School, Denmark; and Tapiolan School, Finland. The administrative, social and historical contexts in which the school was developed, its goals and purposes, and the management, implementation, and impact of the innovative practices and activities are discussed. Questionnaires used in the studies are provided. (Author/RM)

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This publication is one of a series of four volumes
on educational innovation:

Volume I is concerned with central institutions;
Volume II deals with innovation at the regional level;
Volume III deals with innovation at the school level;
Volume IV "Strategies for Innovation in Education",
summarizes and draws conclusions based on the earlier volumes.

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Centre for Educational Research and Innovation (CERI)

CASE STUDIES OF EDUCATIONAL INNOVATION:

III. AT THE SCHOOL LEVEL

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
1973

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PREFACE

During the last two decades the schools, which were traditionally the cornerstones of social stability and continuity, have become the crucible of social change. It was to be expected that societies which have opted for rapid economic and technological changes would be faced by deep social changes reaching into the schools. What perhaps was not bargained for is that - as increasing affluence has sparked off demands for equality - the school itself has become the platform for social change.

Today we can see the signs of a reaction, in terms of a reemphasis of the educational as opposed to the social role of the school. The theme that standards of education should not be sacrificed to social aims is advanced to combat those who see the school as an instrument of social policy.

In these circumstances the theme of innovation in education is as sensitive as it is important. Yet no one can doubt that all countries are impelled towards a headlong process of change in the schools, and that an assessment of attempts to make this an effective process is overdue. For whatever the different social attitudes concerning the role and its role in society, it is not feasible to expect a standstill in the school whilst at the same time accepting a rapid process of economic, technological and cultural change in the surrounding community. Some way has to be found of relating the school to this process of change in a way that widens opportunities for children, maintains educational standards and recognises that the school must have a foot in both the past and the future.

However, to talk of strategies of innovation, which is to be the general subject of a series of CERI reports, is to assume that it is possible to plan and manage the process of change in the schools. Such an assumption is sometimes challenged on the grounds that organisational structures to promote educational change will become a "technocracy of innovation", and thereby stifle the creativeness of the teachers in particular and the schools in general. But is not the reality that what the teacher and his pupils can achieve is greatly constrained by lack of information, resources and - let it be said - organisation.

Potential innovations assail the schools on all sides with little hope of a considered or systematic evaluation - so that they may be rejected or adopted according to proven merit. Surely the answer lies in some sort of balance between an organised process and the free initiative of the individual school or teacher, a balance that will be struck in different ways in different countries according to their traditions.

CERI's studies on innovation in education have tried to evaluate what is actually happening in different Member countries to achieve this balance, and to establish effective institutions in the different national circumstances. Seventeen case-studies have been carried out at the national, regional and school levels (for the list see below), involving the efforts of some twenty-four research workers. The aim has been to diagnose the reasons for success and failure, and to probe the conditions under which planners, administrators and teachers can work together effectively.

The results of this major study will be published in four volumes, of which the present Report is Number III,as follows :

Case studies of educational innovation

I - at the central level

II - at the regional level

III - at the school level

IV - Strategies for Innovation in Education - A synthesis

The broad conclusion to be reached from all this work is that, regardless of educational philosophy and political traditions, all countries are now grappling with the problem of organising a continuing process of change in schools. Already many new institutions are emerging, and the elements of policy begin to be defined. No country can afford to ignore these trends, even if only because the schools are influenced by new ideas from other countries as well as those from within national boundaries. A policy for innovation, and institutions to produce it, is becoming necessary in one form or another. It is hoped that this series of reports will assist countries to build their own arrangements faster and more effectively than would otherwise be possible.

CERI owes its appreciation to many individuals, institutions and authorities for the vast amount of willing energy that has been devoted to the completion of these volumes. They are too many to be thanked individually, but their contributions will emerge as the series of reports is published.

J. R. Gass
Director

Centre for Educational Research
and Innovation

CASE STUDIES OF EDUCATIONAL INNOVATION :

III - AT THE SCHOOL LEVEL

Part One

Countesthorpe College, United Kingdom, by
Gerald Bernbaum, University of Leicester.

Part Two

The Experimental Gymnasium, Oslo, Norway, by
Trond Hauge

Part Three

Thornlea School, Ontario, Canada, by Michael Fullan,
The Ontario Institute for Studies in Education.

Part Four

Rødovre School, Denmark, by Tom Ploug-Olsen

Part Five

Tapiolan School, Finland, by Lyyli Virtanen

Part One

COUNTESTHORPE COLLEGE, LEICESTER, UNITED KINGDOM

by

Gerald Bernbaum, University of Leicester

Still as they run they look behind

* * *

Yet see how all around them wait
The ministers of human fate

Ode
On a Distant Prospect of Eton College
Thomas Gray

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PREFACE

The preparation of a case study of this kind clearly involves the co-operation of many people, especially as the time available for field work and the collection of data was very brief. My thanks, therefore, must go to Mr. Stuart Mason, Director of Education for the County of Leicestershire, who has given me his full permission to conduct the study and who allowed me to interview him at length about the plans for establishing Countesthorpe College and his hopes for the future development of innovation in education. At the University of Leicester School of Education my colleagues Margaret Mathieson and Tom Whiteside have given me a great deal of help in collecting data and with the preparation of the manuscript, whilst Margaret Mortimer and Daphne Remington have undertaken all the necessary typing and collation with enthusiasm.

My main debt, however, must be to the children and staff of the Countesthorpe College and to its Warden, Tim McMullen. The establishment of a large new school is never easy, but the establishment of a school designed to be innovative and planned to be progressive is especially problematical. At all times, however, I have been welcomed into the school, all with whom I have come into contact have co-operated by answering my questions and by taking seriously the project of looking at the establishment of the school and its mangement of innovation. The time when I was at the school was especially difficult. Countesthorpe College had only been open for four months and the construction work on the site was not yet complete. Moreover, there had been unusual difficulties in the Supplies Department of the Leicestershire County Council, which had delayed the arrival of much important equipment at the school. Also, of course, it should be remembered that at this stage the school has pupils of 11 to 14 years, whereas it has been built as, and will eventually become, a school for pupils of 14 to 18 years old. These peculiar circumstances, therefore, undoubtedly placed upon the staff and pupils an unexpected burden. In my description of the school, I have emphasised throughout those conditions and circumstances which might, therefore, be atypical.

I hope, nevertheless, that I have captured the nature and ethos of the school and that I have described accurately its main features. In discussing the constraints, difficulties and problems facing the school I hope that I have reported judiciously the assessments of those who work in the school and utilised their views in the context of my own knowledge of the social sciences in respect of what is already known about inter-personal relationships, differential value systems, the relationship between education and social structure and the diffusion of innovations. Most especially, I have drawn heavily on the theoretical arguments of Professor Basil Bernstein, developed in his paper entitled On the Classification and Framing of Educational Knowledge.

Those who know this stimulating paper will recognise the extent to which the later sections of my work have been influenced by it. In concluding this introduction, therefore, I emphasise my gratitude to the people already mentioned but must, nevertheless, point out my personal responsibility for what follows. The faults, particularly, remain obstinately my own.

G - B.

Chapter I

THE ADMINISTRATIVE,SOCIAL AND HISTORICAL CONTEXTS

It is not an accident that Countesthorpe College, the school which has been described in the leading educational newspaper as" the most advanced working model in Europe of the theories of secondary education that have developed in the last few years ", (1) should have been established in the county of Leicestershire. During the twentieth century the county of Leicestershire has established a reputation for innovation and progressive change in education which is probably not matched by any other administrative unit in England and Wales. In part this has been due to the long service of the two Directors of Education who have, between them, been in control of the educational arrangements within the county for almost all this century. Sir William Brockington, who was appointed in 1906, served until 1947, when he was succeeded by the present Director, Mr. Stuart Mason who retires in 1971. Moreover, Sir Robert Martin, who was Chairman of the Education Committee in the critical period of the late 1950s, had also been Chairman of the whole County Council for 37 years. There are, of course, occasions when long service on the part of key personnel can be restricting and prevent the flow of new ideas and the operation of new plans. On the other hand it can be the case that the prestige and experience of the long serving leading actors can be the guarantee of innovation, especially where political skill and tact might be necessary in overcoming the opposition of interests vested in the maintenance of the status quo. Certainly, Sir William Brockington and Mr. Stuart Mason have established a reputation for successful innovation. Not only did Brockington eagerly adopt the motor car in the years before the First World War, and so enable himself to arrive at remote village schools where he could amaze both pupils and staff, but he was also responsible for the introduction of change in the 1920s and 1930s, following the report of the Hadow Committee of 1926 which proposed major alterations in the elementary school structure. The alterations involved replacing the 5 - 14 years elementary school with two schools, one for pupils below 11 years old, and one children between 11 and 14 years old. For a whole variety of reasons, religious and financial, the proposals were not easy to adopt and in

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1) Times Educational Supplement. 4. 9. 1970. N° 2885.Leading article.

Leicestershire under Brockington more progress was made than in many other parts of the country. In addition, Sir William Brockington had been instrumental in refining the arrangements for selection of the 22 - 25 % of the junior school population which was to be admitted to the grammar schools. Paradoxically, however, it was in the long run to be the problems arising out of selection for grammar school education which gave rise to the major innovation with which Leicestershire is associated.

Following the Education Act of 1944 by which the local education authorities were made responsible for providing secondary education for all, most decided that the best way of utilising the human and capital resources available was to have two main types of secondary school, grammar and modern. There were, however, far more modern schools than grammar schools,and over the whole nation something under 20 % of the relevant age group entered grammar schools. Clearly, therefore, the selection procedures by which pupils at 10 and 11 were allocated to the schools came to be regarded by parents, administrators and teachers as of critical importance, especially as the grammar schools were seen as the schools for the successful pupils. These were the schools which prepared pupils for the major public examinations, which offered the opportunities of entry to the universities and the professions, and which had almost 90% graduate staff.

From the beginning, therefore, there were complaints about the operation of the selection arrangements, particularly about the age at which they were applied to pupils, their apparent importance and finality, their arbitrary nature and their effects on the life and work of the pupils in the primary schools. The complaints and problems were particularly marked during the middle and late 1950s. At this time the large number of children born in the mid-1940s were approaching the age of selection, and for the first time for many years there were around a million children in each year group for whom arrangements had to be made. As the number of grammar school places remained relatively fixed the number of apparent "failures" amongst the pupils was bound to increase, and along with it parental anxiety and teacher dissatisfaction.

It was in this context that Mr. Mason, by now Director of Education, devised his plan to cope with the difficulties and problems described. At the time of its introduction in 1957 the plan was a most significant innovation in educational administration in England, and though by the late 1960s other local authorities had adopted the same or similar arrangements, the Leicestershire Plan has remained a major focus for all interested in the reform of educational structures.

Briefly, the plan involved abolishing selection at 11 and transferring all children at that age to high schools where they were to remain until 14, at which point they could, if they wished, transfer to upper schools where they could continue their studies until they were 18. The critical point of transfer, therefore, was to become 14 rather than 11, but at this new age there were no examinations or tests, and the children moved on to the upper school purely as a result of parental choice. Those who did not transfer remained at the high school and were normally expected to leave school at 15. The plan was not implemented fully, but regarded as experimental for its first few years, operating in only selected areas of the country. By 1970, however, the plan had been introduced throughout the area and has been modified so that all children will now transfer automatically at 14 from the high school to the upper school where they will stay until at least 16, which is to become the new national minimum school leaving age. In essence the old grammar schools were transformed into the new upper schools for pupils of 14 - 18 and the secondary modern schools became the new high schools with pupils of all ability from 11 - 14. The change, therefore, could be accomplished within the existing buildings, though over the last decade these have been supplemented and replaced by a large rebuilding programme. It should be plain, therefore, that the Leicestershire Plan was a major administrative innovation, for it was essentially a comprehensive scheme which abolished selection at 11. The extent of the change was clearly well recognised by Mason, for at the time of the original scheme in 1957 he declared that he was "very conscious that the proposal is of the utmost gravity. It involves a revolutionary change in the educational system ... I submit it in the conviction that it will in no case restrict educational opportunities and that it will enhance the esteem and dignity of the grammar schools and secondary modern schools alike". (2)

From the point of view of the present study, however, the question which requires further investigation is the degree to which the new Leicestershire Plan necessarily involved innovation at the level of the individual school, that

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2) S. C. Mason, as quoted in Hinckley Times and Guardian 12. 4. 1957

is, within the schools. In fact innovations of this kind were rarely mentioned explicitly in the official discussions of the new proposals. Thus, in his report to the Education Committee, Mason justified his experiment more in terms of the system as a whole. He discussed the failure of the examinations for selection at 11 to predict accurately the future development of children, and the way in which the examination was a source of anxiety to parents. At the same time Mason argued that the importance attached to the examination by parents influenced teachers and consequently spoiled the opportunities for work in the junior schools as teachers came to concentrate on the narrow techniques necessary for examination success. At this stage, therefore, it is unlikely that there was a great deal of awareness of the possibilities of innovation within the secondary schools in terms of changes in pedagogy, curricula or inter-personal relationships. Nor is it likely that this could be the case given that the Plan was still at the experimental stage, and that, in the English tradition, each individual headmaster had vital control over the three areas mentioned.

Nevertheless, by the 1960s when the plan was established, there is some évidence that at least in respect of inter-personal relationships Mason had recognised that the new schools might be able to develop an atmosphere which was unusual in English schools. Thus by 1960 Mason felt able to write : "It should be possible to create in the grammar school a much more adult conception of staff/studentrelationships, and the prospect of going forward from the high school to a more adult school community should mitigate the desire of many young people to shake off the shackles of school". (3) Five years later, in 1965, Mason was even more forceful, arguing that the new upper schools "would become schools exclusively for young grown ups and would be able to develop more appropriate staff-pupil relationships for these "students". (4) In addition he claimed that he "would prefer to see children stay as long as possible in examination free schools", and that he "did not believe their results will be any worse as a consequence". (5)

It seems, therefore, that by the middle of the 1960 s the Director of Education was considering the possibility that one effect of his Plan would be to change the nature of relationships within the schools by lessening the restricting

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3) S. C. Mason, The Leicestershire Experiment and Plan, Councils and Education Press, 1960. p. 13

4) S. C. Mason, "The Leicestershire Plan", Comprehensive Planning ed. S. Maclure, Councils & Education Press. 1965. p. 54

5) S. C. Mason. Ibid P. 57

effects of examinations and by enabling the pupils to experience a more mature and egalitarian treatment from the staff. The point is, however, that the degree of innovation associated with the Leicestershire Plan cannot be limited in this way. For over the last few years it has clearly enabled change and innovation to occur at the level of the individual school. As the tests at 11 were gradually removed more autonomy was restored to the primary school, and the teachers in them were less subject to parental anxiety and pressure. Consequently, the heads and teachers had the opportunity to broaden the range of work undertaken and to adopt more flexible methods in their teaching. By the mid-1960s the organisation and work of many of the Leicestershire junior schools were being given much attention in the educational press. In a similar fashion the new high schools for children between 11 and 14 were now free of the constraints of the examination system and the staff in these schools also could take the opportunity and the risk of adopting more modern, progressive and flexible techniques.

In the new upper schools, which had largely been founded upon the traditional grammar schools, the prospects of change at the level of the individual school were the least clear. The headmasters of these schools had a long history of resistance to the control of the local authorities ; it was almost impossible for a school dealing with 14 - 18 - year - old pupils to avoid the constraints imposed by the system of public examinations and the pressures for selection drawn from the occupational system. At the same time these schools contained many of the teachers who were most opposed to the implementation of the Plan, and who felt they had most to lose by allowing a fully comprehensive entry to their schools. Nevertheless as two authors interested in change plaintively declared as early as 1964, "In Leicestershire, it is simply a great deal more obvious that the upper schools cannot stick to the old pattern". (6) There is a real sense in which their mixture of forecast and aspiration has been realised. The upper schools have changed. The abilities and interests of the pupils in the schools have widened and new staff have had to be recruited to deal with them; consequently the curriculum has altered also and is now much broader in the options it offers to pupils. Finally, as Mason anticipated, with pupils of between 14 and 18, of whom a very large proportion are in the sixth form, the nature of

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6) M. Armstrong & M. Young, New Look at Comprehensive Schools, Fabian Research Series, N°. 237. Jan.1964.
It is interesting to note that Armstrong is now a teacher at Countesthorpe College.

pupil-staff relations has changed, tending to give pupils more individual choice and freedom and more opportunity to express their individuality.

Over the last decade, therefore, the Leicestershire schools have undergone a great deal of change and innovation. Moreover, they have had a great deal of publicity and have been seen to be the centre of an experiment. It is very likely that as a result they have tended to attract teachers committed to the values embodied in the changes, and maybe to change itself. It is possible to argue, therefore, that such teachers are likely to possess personality characteristics which will lead them to innovate over a wide range of their activities and to be disposed to encourage change in a variety of educational spheres. Thus, Countesthorpe College can be said to have been established in an administrative context which has encouraged innovation, in an education authority whose Director has been personally responsible for a major administrative change. Finally, there are many teachers committed to new educational ideas in the region ; their work has been subject to much publicity and the Plan to much scrutiny, so that in Leicestershire there might be said to be an overall expectancy that further educational innovation would be followed. Indeed Mason himself noted in interview that "for teachers to come and work in Leicestershire schools, they must know they're involved in an experiment".

A further point of some importance is that Countesthorpe College is the first completely new upper school to be built in Leicestershire since the Plan was initiated. It has therefore been given a great deal of attention and thought by the relevant officials of the authority. The decision to build a new school in Countesthorpe was taken for largely demographic reasons. Over the last 20 years the County of Leicestershire has been gaining in population, not only by natural increase but also by migration. In the county as a whole the school population is now about double what it was in 1948. At first most of this increase was in that part of the county close to the boundary with the City of Leicester (which is administered by a separate local authority). More recently, however, with increased rates of car ownership and the high price of land near large cities, there has been a tendency for development to spread into neighbouring villages. The school at Countesthorpe has been established to cater for the increase in children brought about by the movement into that part of Leicestershire.

The village of Countesthorpe is about 8 miles to the south of the city centre of Leicester. In common with its neighbouring villages Countesthorpe was wholly agricultural until the middle of the 18th century when framework knitting became established around the village nucleus. Today there is a small-scale hosiery industry including three factories and a dye works, though the original nucleus of the settlement retains much of its former rural character. The majority of the population of the village no longer work in Countesthorpe but commute to the major centres of employment in nearby Leicester and Rugby During the inter-war period ribbon development spread westwards along Station Road, but the major changes have occurred over the last decade with the establishment of a number of private housing estates (see Diag. I). The changes have been rapid and substantial, and can be readily quantified.

The population of Countesthorpe as shown by the full census of 1961 was 2, 249. Five years later, in 1966, this figure had increased to 2, 730, and in mid-1968 the population had reached 4, 400. The Leicestershire County Council Planning Department estimate that by the end of this decade the population of Countesthorpe will have reached 6, 000. These changes have also been accompanied by changes in the age structure of the village.

Table I

Age Structure 1961 (Full Census)

	0-4	5-14	15-19	20-24	25-29	30-44	45-59	60-64	65 +
Male	92	232	70	59	61	204	197	58	113
Female . . .	87	197	79	73	45	226	230	60	166

Age Structure 1966 (Estimate from 10% Sample Census)

	0-4	5-14	15-19	20-24	25-29	30-44	45-59	60-64	65 +
Male	60	320	100	140	120	230	240	60	120
Female . . .	150	150	70	120	130	160	230	70	160

Important features of these figures are the increase of almost 100 persons below the age of 19 and the very large increase in the number of females (118 to 250) in the important childbearing age-group 20-29. Less official estimates since 1966 indicate that changes of this kind have continued over the last five years.

It is interesting also to note the nature and extent of migration into the village for which figures are available from the 1966 Census. These show clearly the high rates of geographical mobility, largely associated with the new private housing estates.

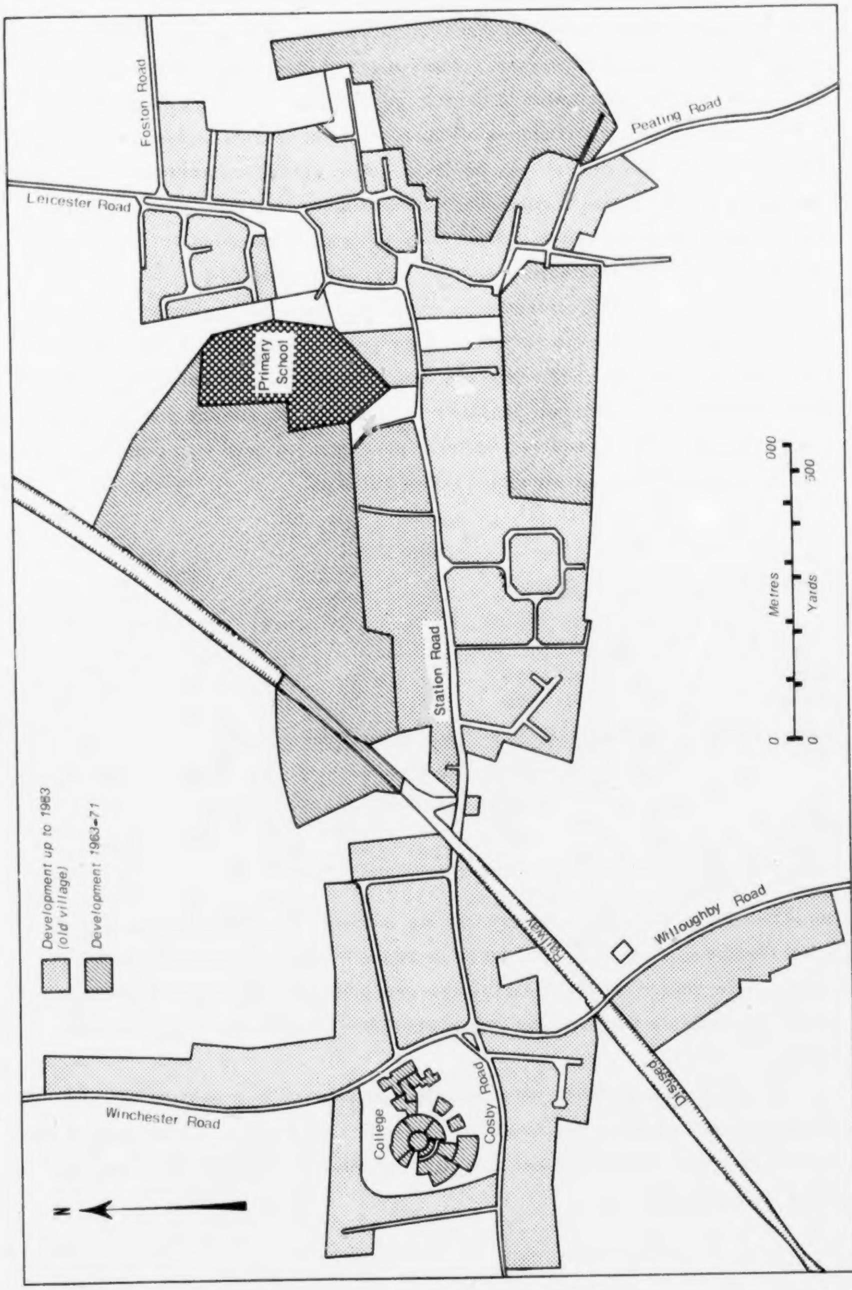
Development up to 1963 (old village)
Development 1963–71
N
Foston Road
Leicester Road
Peatling Road
Primary School
Station Road
Metres
Yards
0
500
0
500
Railway
Disused
Willoughby Road
Winchester Road
College
Cosby Road

Table II

1966 MIGRATION TO COUNTESTHORPE

(estimate from 10% Sample Census)

	15	15-44	45-49	60-64	65 +
During pastyear	130	310	30	0	20
During pastfive years	220	720	170	50	30

Again, attention is drawn to the high proportion of migrants in the younger age groups, either of school age, or the age of potential parents. A further insight into the changing social structure of the village can be gained by comparing the homes that are owner occupied with those that are owned by the local council. In 1961 for every council-owned house there were 3. 8 houses which were owner-occupied. In 1966 the ratio was 1:4. 6, and though there are no more recent official figures, it is clear that this movement has been accelerated between 1966 and 1971, as there has been little council building but many private housing estates have been developed. Though the data presented has concentrated upon changes in Countesthorpe, similar changes have occurred in nearby villages which are part of the catchment area of the school. Blaby, in particular, has undergone rapid development of the sort described at Countesthorpe and the radical changes in Wigston have already been the subject of social investigation (7).

As far as Countesthorpe is concerned, however, there is nothing that is unique in the religious composition and its social class composition in 1966 was very similar to that of the nation as a whole (see Table III).

Table III

SOCIAL CLASS COMPOSITION OF COUNTESTHORPE 1966 : ALL MALES

	Social Class	%
I.	Higher Professional & Managerial	7
II.	Intermediate Non-Manual	19
III.	Skilled manual and routine non-manual	53
IV.	Semi-skilled	17
V.	Unskilled	4
		100

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7) N. Elias & J. Scotson. The Established and the Outsiders. Frank Cass, London, 1965.

It was in the context of the developments described above that, in the mid-1960s, a decision to build a new school at Countesthorpe was made. It will be recognised at once that changes in numbers bring changes of other kinds. The need to build new schools to cater for additional pupils gives the opportunity, at least, to build different schools, whose architecture may encourage new teaching techniques and organisational patterns. Thus new approaches to education are much more readily developed in those areas, like Countesthorpe, where due to population changes, entirely new schools have to be built.

Nevertheless, even though the existing conditions made innovation possible, they could not guarantee that it would occur. In order, therefore, to understand how the school came to be established, attention must be paid to the beliefs and attitudes of the Director of Education for Leicestershire, who from the very beginning played a leading part in the foundation of Countesthorpe College, particularly in the planning and design of the buildings.

It is, in fact, impossible for a new school costing more than £ 30,000 to be built by a local authority without the initial approval of the Department of Education and Science, the central government ministry concerned with education. In order to begin to be considered on one of their programmes a "basic need" must be established by the local authority. Essentially this becomes a matter of places for the children at school ; in the last resort, the authority must demonstrate that, if the school is not built, then children will not be able to be offered schooling.

The plans and brief for the new school were devised by the Education Department of the Leicestershire County Council, and these served as the overall guide for the architect. The brief relates both to the availability of facilities and the purposes of the school as seen by those responsible for establishing it ; in order to appreciate it fully, the beliefs and ideologies current at the time need to be carefully examined. Important in this context is the opportunity which has been given in the Leicestershire primary schools to adopt new and flexible approaches following the gradual abandonment of the examination at 11. As suggested earlier, the Leicestershire primary schools were amongst the first in the country to establish a reputation for innovation, and the work in them has been the subject of much publicity and comment, most of it of a very favourable kind. As Mason argues, "We probably have more interesting primary schools per 1000 of the population than most local authorities, because we broke away from tradition probably earlier than most."

These changes in the primary schools have been in the direction of greater variety of techniques, and flexibility in their adoption, along with a much stronger emphasis on the learning of the individual child. The unit has ceased to be the class, or even the group, and has become the individual. At the same time there have been attempts to encourage inter-disciplinary work, lessen the domination of the old single subjects, and weaken the influence of the fixed time-table arrangements. The point that Stuart Mason would wish to make in respect of these newer methods is that more and more he was thinking,"Well, if this works for children up to the age of 11, why should it suddenly stop ? - a tremendous amount of thinking is going on about how one can foster individual learning and discovery methods, and inter-disciplinary studies in the higher age groups." What particularly impressed Mason as a result of the changes in the primary school was what he saw as the enormous rapidity of educational change, so that "it was quite clear that the kind of school which we were building 10 years ago and which no doubt 10 years ago was thought to be pretty progressive, within 10 years has become totally out of date". Mason agreed, therefore, that unless there was much careful planning at the outset schools currently being established would become obsolescent even more rapidly. Two points, particularly, concerned Mason : firstly that it was his job as the chief educational administrator in Leicestershire to prepare for the changes which were going to come, to keep up with developments in education rather than just follow them ; secondly, that the new schools, including the one at Countesthorpe, should have buildings which were sufficiently flexible to be adapted to changes in the coming years. In fact, though, it is also the case that Mason is a strong supporter of the current trends in educational ideologies and practices, especially of individualised learning and learning bv discovery, and thus is anxious to encourage these changes in the schools for which he has overall responsibility. Moreover it should be emphasised that the Director of Education of a local authority is in a uniquely strong position to innovate, especially at the level of administration and school design.

In attempting to implement the policies of greater flexibility, inter-disciplinary work and individualised learning, at the level of the design of schools, Mason found that the biggest obstacle was the regulations relating to school building which demanded that schools should be lit from the side by windows, and that each part of a school classroom must obtain a minimum amount of natural light. The design consequences of these regulations are that it is almost impossible to build a school which is more than 2 unit spaces wide with a corridor down the middle, in order that the daylight factor can be maintained. It means also that the leading units within a school are likely to be strung out, getting further and further away from each other, a factor which Mason believes has important consequences for the degree of staff co-operation that can be expected. Nor does Mason believe that vertical building can solve this problem as he argues that staircases can be formidable psychological barriers.

Mason concluded, therefore, that given the lighting regulations and his desire for flexible buildings in depth, the only solution was to abandon lighting from the side and to replace it by natural lighting from above. In passing it is interesting to note that the daylight regulations were themselves seen as an important progressive measure when they were introduced in order to prevent children working in poorly lit conditions. Now, however, they have come to be defined as a constraint and a restriction upon change and innovation.

Mason's advocacy of one-storey buildings with daylight being admitted from above does enable teaching areas to be developed in depth and this policy has been significantly adopted at Countesthorpe. On occasions, five or six teaching units have been placed together with little permanent division between them, making re-structuring of the buildings very easy. At the same time it also makes possible the siting of the library/resource area in a strategic position in the school so that it can become a focus within the school, rather than "just at the end of the corridor". Clearly, in a scheme based upon individualised learning and project work, access to, and familiarity with the resource area are vital factors in the progress of the children.

An advantage of building in depth which Mason regards as having provoked much interest amongst educationists and therefore likely to be sought elsewhere is that associated with lay-out and size of the craft and design area. The large space available here has enabled all these subjects, art, craft, design, pottery, needlework, housecraft, to be placed together. Mason believes strongly that, as a result, the co-operation between the subjects and those who teach them will increase, and that this will benefit the children. Moreover, the importance and prestige of these subjects can be raised in the school as a result of this unification. Larger departmental allowances are available for staff and a clear hierarchy within the Design Department at Countesthorpe has enabled it to compete on more equal terms with the usual academic subjects. Thus, the head of the Design Department has under his control the largest physical area of the school of any departmental head, has the most expensive equipment to order and is in receipt of the largest departmental allowance available (Grade E) and is certainly regarded by Mason as "as important as the Head of Science or Mathematics". Similarly, the school was planned in order to place the Design section near to the Science area. In this way the Director hoped to foster the Engineering side of Design, by emphasising its links with Mechanics and Physics.

The overall design of Countesthorpe College can be seen in Diagram I. What is clear from that diagram and from the above discussion is that a great deal of the innovation is associated with the design of the school and its architectural features. The school was not designed, as is usual, by the County Architect's Department, but by a private company, Farmer and Dark Limited, whose chief architect on the project, John Barton, echoes many of Stuart Mason's views when he argues that the circular arrangement of the school and its central courtyard give the building a focal point and make communication lines reasonably short. Moreover, claims Barton, the open planning "curtails social schisms".(8) Clearly, both Mason and Barton have adopted views which are close to some form of architectural determinism. Both are very impressed by the influence of architectural and design arrangements on the quality and extent of social interaction. It is likely, however, that there are many other variables which have to be considered when discussing social relationships and it would be a mistake to assume that all the objectives, and perhaps, aspirations, embodied in the design of the school will become manifest in its operation.

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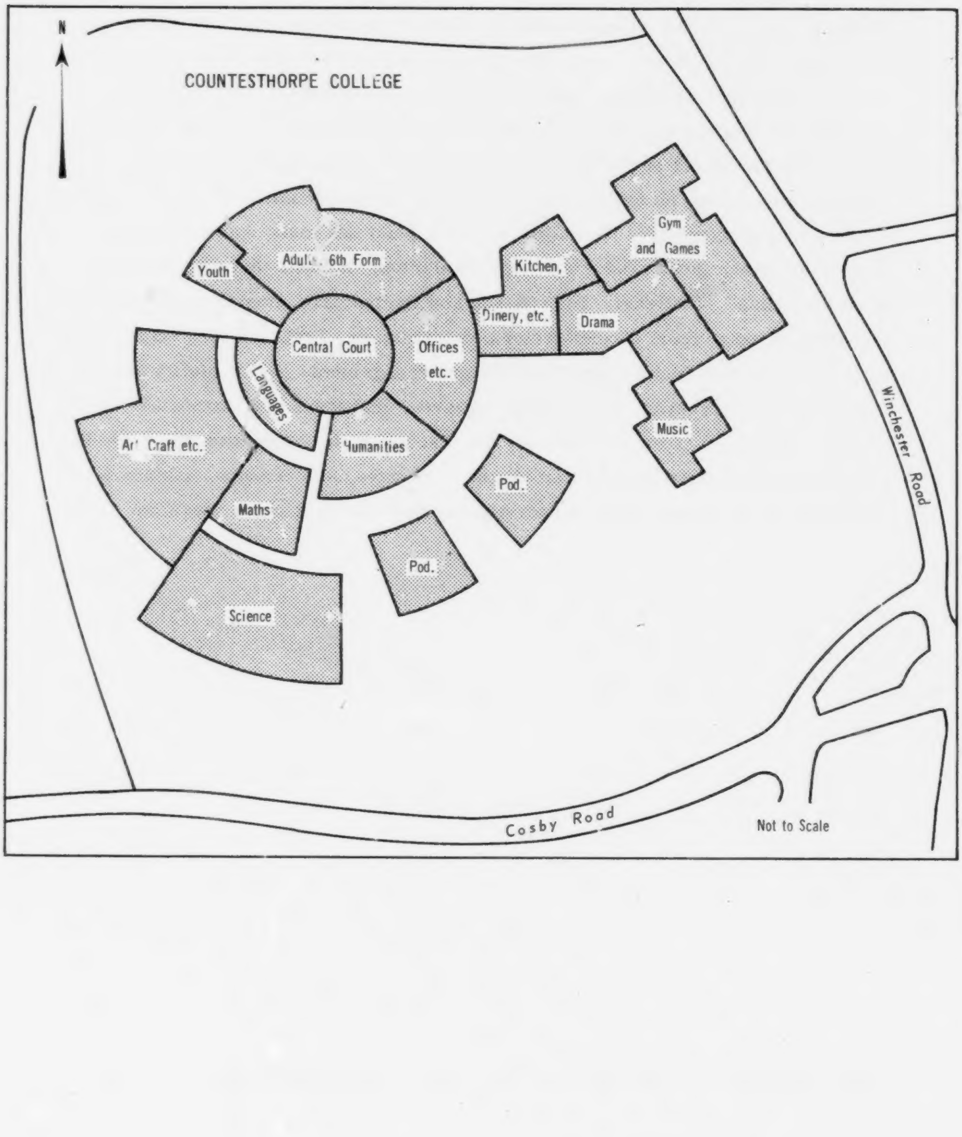
8) K. Stephenson, "Countesthorpe Permissive" - Building Design 16. x. 70. p. 14


N
COUNTESTHORPE COLLEGE
Youth
Adult, 6th Form
Kitchen,
Dinery, etc.
Gym
and Games
Drama
Central Court
Offices
etc.
Languages
Art Craft etc.
Humanities
Music
Pod.
Maths
Pod.
Science
Winchester Road
Cosby Road
Not to Scale

Chapter II

THE GOALS OF THE SCHOOL

In much contemporary writing on educational administration and the sociology of the school it is common to talk of the "goals of the school". In reality, however, it is difficult to see how these can be explicated except in terms of the goals and purposes of individuals or groups of individuals. It follows therefore, that different individuals or different groups might hold different goals with respect to the nature and work of the school. Clearly the investigation of these different goals is a major empirical task. Nevertheless, the goals of the administrators, teachers, pupils and parents will be discussed in the light of the overall work and design of the school.

It should be noted that, given the long tradition of the autonomy of English schools, it is extremely difficult for detailed interference by the local authority to occur on a day to day basis. Thus, as Mason pointed out,the establishment of the school, its design, and the appointment of its headmaster were to a large degree technical and professional matters which concerned his department only. Once the head was appointed he had almost complete freedom in appointment of staff. As a result, therefore, any political or educational opposition to the school can only make itself felt after the school has been established and its working pattern is known. It follows that it is important to understand fully the goals, or more general aspirations, of Stuart Mason,the Director of Education for the County of Leicestershire,and Tim McMullen the Headmaster, or Warden, as he prefers to be known.

As far as Mason is concerned, the discussion of the design of the school has shown the generally progressive orientation of his goals. It is not only a question of Mason believing that his job as an educational administrator is to build schools which will be able to keep pace with more general changes in education. It is also the case that Mason believes in fostering and encouraging what might be termed progressive changes. Thus, at interview Mason denied that he was neutral with respect to these developments. "I take sides", declared Mason, "but I hope I take sides open-mindedly, fairly, so to speak .... I think educational administration fares better if it is positive rather than negative ....." In his own words Mason is anxious to establish in the schools "the kind of atmosphere where people can have a go ..... it's much better to have had a go and failed than not to have had a go at all". Mason claims that he is not anxious to prescribe the sort of things which people should do but he does "believe in the general kind of trend ..... I mean I do believe that individual learning .... is a better thing than class learning". Moreover he argues "that anything that moves towards a development of all the talents and interests of each individual is basically good". In the setting up and establishment of the school at Countesthorpe, Mason clearly recognises his own contribution and the diffuse origins of his ideas ; thus he claims that as far as the conception of the school goes, "it is awfully difficult to claim that it is me or that it's someone else ; I think that a lot of the basic ideas probably originated from me, though I don't mean that I invented them. For whenever I thought that I invented anything I immediately observed ...... that somebody else thought of it and that it's happening somewhere else". Thus as far as Mason was concerned, his main goal in establishing the school at Countesthorpe was to provide the conditions under which all kinds of opportunities would be available to the teachers and pupils of the school. It was vitally important,therefore, that great care was taken with the appointment of the headmaster. As the headmaster has a great deal of control over the choice of staff and the internal organisation of the school, his goals and orientation with regard to education can be a significant determinant of the work and ethos of a school. Mason clearly recognised this, for he argued that, "Having built a school that is so obviously on the side of the trends in which education appears to be moving ..... quite obviously we would be looking for somebody who was in sympathy with the changes ..... and we would very much like to have somebody who is a bit ahead".

From a very large number of applicants, Tim McMullen was chosen to be Headmaster. He has had a crucial influence on the early life of the school and it is imperative that his ideas, goals and objectives are examined in detail. Fortunately it is possible to do this, utilising three main sources. In 1968 McMullen published an article entitled "Flexibility for a Comprehensive School" in the journal Forum, in which he set forth, in great detail, the objectives he would have if he were to be put in charge of a comprehensive school.(9) Moreover, he reflects on the changes that have occurred in his own thinking since he was appointed to his first headship, ten years previously, in 1958. This article will be used as a major source of data in relation to McMullen's ideas. Secondly, in February 1971 McMullen lectured to a group of postgraduate

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9) T. McMullen "Flexibility for a Comprehensive School", Forum, Spring 1968, x. 2, pp. 64-66.

students of the University of Leicester School of Education about his school at Countesthorpe. This lecture was tape recorded and will also be used in the ensuing discussion of McMullen's goals, purposes and aspirations. Finally, for this research project McMullen was interviewed at length in order to probe, in depth, his views and attitudes on education, and his part in establishing the school.

When McMullen first became a headmaster of a school in the late 1950s, he claimed to have three major aims. His first objective was to develop the intellectual ability of every child through exposure to academic work. McMullen was convinced that more children were capable of success at the public examinations of Ordinary and Advanced Levels than was normally thought possible. Thus, he emphasised the importance of examinations for career success and encouraged organisational arrangements in the school which differentiated children by academic ability. His second aim was to ensure that each child was looked after as an individual.. He wished to be confident that someone knew each child's personal and social background, and to achieve this a member of staff with a reduced teaching load was given special responsibility for the pastoral care of 150 - 250 children. Finally, McMullen was anxious to establish a relaxed and friendly atmosphere in the school ; to create this, authority was to be related to the person of the teacher and his activities rather than to the teacher's position as such.

In the decade of the 1960s, however, McMullen's thinking changed radically, and he now no longer looks upon his initial objectives as adequate. Important in his redefinition of the situation has been the awareness of the need for a clear set of objectives, which almost certainly stems from his work on curriculum and resources development. Nevertheless, accompanying the substantive changes in his ideas has been his growing concern with what he sees as the increasing rapidity of social change. McMullen is particularly impressed by the importance for education of changes coming in the world between 1975 and 2025, which is the time during which the present generation of schoolchildren will live their adult lives. McMullen emphasises especially the immense potential changes in technology which will, he believes, have the effect of rendering particular skills out of date. The aim of education, therefore, should be to develop general abilities in the children. At the same time, McMullen attaches great importance to the increased leisure which will be available to people in the future. Simply, McMullen's argument is that change is coming about in schools because of a growing awareness that traditional education does not fulfil the needs of the students in a changing society. As he has said, the old style education is inappropriate, as "the country is changing, society is changing and the changes are coming fast".

In his article in Forum, McMullen has set out clearly his ideas on the possible future relationship between education and society. According to McMullen, the rapidity of change implies "that the individual who will achieve satisfaction over this coming half century must have a clear sense of his own identity and ability, must have developed intellectual and emotional strategies that make for adaptation to change. Emotional satisfaction must come entirely from his relationships with the small groups he lives, plays and works with, but these may change over his lifetime and may involve others from differing social and racial backgrounds. He is unlikely to develop an absolute ethos that will serve him for the fifty years of his adult life ; he will need to decide on ethical guide lines at any given moment, but he must also be prepared to re-examine them in the light of changing social structures and organisation. In the face of shorter working hours and less exacting or stimulating work, he will have to develop a full life outside his working hours, one that allows him intellectual, emotional and physical actions that bring satisfaction."(10) This lengthy quotation offers an impression of the overall goals which McMullen has for a school and a system of education. Inevitably, since they were presented at a very high level of generality, they required more particular explication if they were to be operationalised in a practical fashion, a task which has been undertaken by McMullen in a recent article, "The Clarification of Aims and Objectives as an Aid to Making Decisions", in a book, Teachers as Managers, edited by George Taylor.

McMullen approached the question of operationalising the generalised goals by looking at the content of education and the methods of teaching. He asked, "What is the most relevant knowledge to the 16 year old ?" and provided the answer that the 16 year old should know about himself, about his relationship with people and about the various parts of society which he is going to go into. A major objective was therefore, "to give the individual knowledge about himself, his relationships to the small groups he works, lives and plays with and the relationships of these groups to the larger societies." (11) Similarly, McMullen has urged that children have to be given the chance to develop various attitudes, and also their personalities, but he has insisted it is for "them to

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10) T. McMullen, Ibid. p. 65
11) T. McMullen, Ibid. p. 66

develop, not us to instil". Thus it was important that the school encouraged the children to study independently for a distant objective, planning their "own work and overcoming immediate pressure from drives that would divert them from their goal". Equally, though, McMullen wanted the children to be able to work as members of a group for a corporate end, subduing their own drives for a common end.

In order to foster the capacity to cope with new situations, McMullen advocates strategies that "include both the ability to deduce principles from data and ability to induce instances from general principles". Moreover, these strategies "must also include strategies for problem solving which embrace both scientific proof and judgment". In all of this, though, McMullen reminds us to remember always" that it is the principles and concepts governing relationships rather than information about the structure that is important".(12) In terms of pedagogy, therefore, McMullen is led to advocate individualised learning in order that each child can proceed at his own pace, develop his own motivation, and hence study independently. Similarly, McMullen favours giving the opportunity to pupils of choice and options, in order that individual motivation and responsibility might be increased.

It is not only in the curriculum and the teaching arrangements that McMullen has made a leading innovative contribution to Countesthorpe College, since one of the most novel aspects of the school is the staff democracy. It is this feature which has been the subject of much attention and for which McMullen can claim most of the responsibility. He suggests that an important factor which brought about a change in his thinking, and which led him to reconsider his own fairly autocratic views on being a headmaster, were the events in Paris in which the students questioned the basis of many of the traditional forms of authority. Essentially, what McMullen is anxious to achieve is a "position where the policy of the school is decided by the staff as a whole", and he justifies this, as he does many of his other ideas, in terms of his estimates of the future. Thus McMullen told the graduate students, "If you actually really believe, as I do believe, that the development of the next fifty years will be to mix a central elective democracy such as we've got at the moment with a great increase in the rate of grass roots participatory democracy ..... (then) we shall increase very considerably the people controlling effectively the matters that effect their everyday lives ..... then you've got to start it in a school." Moreover, McMullen is confident that greater staff participation in the govern-

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12) T. McMullen, Ibid. p. 66

ment of the school will tend to improved efficiency in the overall organisation and management of the academic and social arrangements.

McMullen makes few claims to be the absolute originator of the ideas which he is attempting to operationalise and practise at Countesthorpe. He indicates that many of the innovations in respect of the curriculum can be traced to his experience with the Nuffield Resources for Learning Project in which he was associated with a large team, and which in turn drew many of its proposals from the United States. As far as individualised learning is concerned, a major influence has been Taylor's book Resources for Learning.

Nevertheless, it is not only important to consider McMullen's goals and their intellectual origins at a personal level, but is equally vital to see how the objectives and goals have been established at an organisational level within the school. Fortunately, there are good documentary sources for doing this as the Warden and his staff have produced papers which are designed to explain the purposes of the school to parents, and to applicants for teaching posts at the school.

Central to the arguments in these documents is that the opportunity is being offered by the foundation of the new school to rethink the total process of learning within the school, for according to authors "it should mean that we do not automatically repeat an established practice without considering why. At the same time, however, it is regarded as essential that the relative importance of the objectives is established, because they are not looked upon as being of equal significance. Therefore it is argued that "the major over-riding consideration is to provide children with the desire to achieve the objectives we consider essential, the motivation". This is seen as being of two kinds (i) Internal - that is, the arousal of interest in the work for its own sake,(ii) External - the pupils' desire to achieve some distant goal - e.g. an examination or career success, though here it is argued that the staff need to stress the importance of all objectives aimed at in relation to working, living and enjoying, rather than concentrating on the narrow concept of the examination. Also, the pupils' desire to please or not displease peers, staff and parents is regarded as a potent source of motivation. From these general propositions five classes of objectives are derived, and described as the most important features of the educational process - knowledge ; skills ; creative and expressive actions ; personality factors and attitudes.

In the area of knowledge the main point is considered to be that the curriculum should be directed clearly to the "student's knowledge of himself, his relationships with others, both individuals and groups, of groups and their behaviour, of local, national and international aspects of society - in that order of importance". Similarly, the student must come to understand his environment and man's interaction with it. Again, though, the perspective is inter-disciplinary, as it is suggested that there is "a clear need for the selection of those principles and concepts which have a direct bearing on the pupil's understanding of the environment, not on the further development of the subject discipline itself".

As far as "logical processes" are concerned the emphasis here is to be on problem solving, particularly the recall and selection of relevant principles, the construction of hypotheses and the testing of hypotheses against the data. In the long run, therefore, this should lead to a much more problem based curriculum. The authors then move on to consider a set of objectives relating to "skills" and "creative and expressive actions". The relevant sections are quoted in full in order to show the difficulties of attempting to translate general aspirations into precise goals.

Skills

i) Communication skills
  - a) Oral Communication
  - b) Social Communication
  - c) Reading
  - d) Writing
  - e) Numerical and symbolic communication
  - f) Graphical communication and communication by a static visual image
  - g) Communication by a moving visual image - as in film and T. V.
  - h) Communication as in a) and d), in a foreign language.

ii) Skills related to other objectives - i. e. performance skills in music, craft skills, physical skills.

Creative and Expressive Actions

i) Ability and desire to carry out such actions in some of the following fields :
  - a) Two and three dimensional arts and crafts
  - b) Words, music, drama and movement
  - c) In applied science "invention" and construction
  - d) In the field of athletic and sporting activity.

ii) In all areas, an ability to produce 'new' ideas and concepts ; to think laterally rather than convergently.

Finally, there is a long statement of objectives which relate to "Personal Characteristics and Attitudes". Thirteen separate items are listed, including such things as "An ability to understand, as well as possible, one's own behaviour and the motives that lie behind it", "The ability to organise one's own work and play", "A development and recognition of one's own moral code", "An ability to recognise the nature of social situations and to find the right reactions for them". It is clear, as the staff recognise, that there are likely to be many difficulties in translating the generalised goals into precise behavioural objectives. Indeed, in the early months of the school's life all who work in it have been very much involved in this task. Work which it is recognised will have to be continued in the coming years. A great deal of attention has been given to the objectives set out by Tim McMullen because he has played the most important part in establishing the school and in the appointment of the staff. The statements of formal goals obtained from him in different contexts represent significant clues to our understanding of the organisational climate of the school. It is necessary now, however, to see these goals from the perspectives of the teachers, pupils and parents. In order to examine the teacher's perspectives, a questionnaire was developed and administered to all members of the teaching staff. A 90 % response rating was obtained. The questionnaire served to elicit certain background variables, sex, educational experience, teaching experience along with the teacher's perspectives upon the major innovations in the school. At the time of the enquiry there were 51 teachers on the staff, consequently only the most straightforward statistical analysis could be performed as any more sophisticated approaches are not valid for the small numbers involved. A copy of the questionnaire is contained in Appendix I.

In discussing teachers' goals, expectations and self-perceptions it is important to remember that the school at Countesthorpe is the microcosm of the county of Leicestershire. Just as the county recruits teachers who might be especially interested in educational experiment, so Countesthorpe College attracts teachers who are especially committed to change and innovation. Indeed, as Mason approved McMullen's appointment because of the latter's orientation to new ideas in education so, in turn, McMullen has recruited to the staff teachers who are anxious to innovate. Thus 61 % of the staff perceive themselves as having been involved in innovations in the syllabus at schools before they came to Countesthorpe and 55 % in innovations in methods of teaching. If it is noted that 22 % of the staff had no previous teaching experience, then the high proportion of innovators amongst the staff who came from other schools is clear.

The selection procedures for the new school, therefore, seem likely to lead to staff being chosen who would reflect the goals for the school set out by McMullen. Thus, over 90 % of the teachers in the school agree that Countesthorpe can be seen "as the school of the future" and that it will be "influential in bringing about change in educational organisation". Similarly, an examination of staff responses to the open-ended sections of the questionnaire dealing with the objectives of their own teaching shows clearly that McMullen's perspectives are shared by many members of staff. Thus a young science teacher designates as her main objectives making "the science taught here more relevant to everyday life than that usually taught". Similarly, an experienced teacher in the science area describes his objectives as getting "a genuine enthusiastic interest in science", and encouraging pupils "to look at all things in a enquiring way".

Other teachers also align themselves with McMullen's goals when they speak of their own aims in terms of firing "children's interests to do work on their own by choice, not as a pointless chore", or in "developing for the children interest, understanding and enjoyment in the subject rather than on proficiency in mathematical skills". It is surprising, however, that not one of the teachers listed his definite objectives in precise behavioural terms such as is usually done in modern work on curriculum development. The majority could only describe their goals with respect to the curriculum very generally. Evidence of this kind, along with careful observation of the staff, suggests that they are interested in the expressive features of their work rather than in the cognitive and instrumental aspects of it. Support for this argument can be drawn from the fact that when the staff were invited to indicate which one innovation they regarded as the most important, the largest single group, 45 % , chose "greater equality in social relations between staff and children". Only 11 %, for example, selected the "inter-disciplinary curriculum", and just 25 % chose "individualised learning".

Evidence such as this suggests that the teachers at Countesthorpe are not representative of the teaching profession as a whole. Musgrove and Taylor(13) in their study of teachers, parents and pupils found that "all groups of teachers

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13) F. Musgrove and P. H. Taylor, Society and the Teacher's Role, Routledge and Kegan Paul, London 1969.

placed the greatest emphasis on teaching and saw others placing great weight on this function".(14) There are other studies which suggest that secondary school teachers tend to identify with the subjects which they teach and to give less importance to their relationship with pupils. Musgrove and Taylor's work, however, is especially relevant in that they argue that the headteacher is a particular source of anxiety and conflict to the ordinary class teacher. Thus, they write, "in comparison with pupils, headteachers are seen as attaching little importance to friendly, sympathetic and understanding personal relationships".(15) At Countesthorpe, though, this cannot be the case, for, as has been shown, the quality of inter-personal relationships in the school is one of McMullen's major concerns ; as he has stated in a policy document for parents, "the system of governing the school and the relations within it ..... are different and have two main aims ; to develop a sense of real democracy in deciding on the policy of the school ; and secondly, to replace, as far as possible, the sense that adolescents and adults are two armed camps, by a feeling that we are all people of the same kind co-operating in trying to make a reasonable life." At Countesthorpe, therefore, there is unlikely to be the marked incongruence between headteacher, pupils and teachers in respect of their perceptions of the quality of personal relationships which Taylor and Musgrove suggest exists elsewhere. As one very experienced teacher put it, "This is the very first place I've been in where people have really cared for every child".

Before concluding this section dealing with teachers it should be noted that, as in many other social contexts, there is the possibility that differences might exist between the stated goals and the real goals as they turn out to be held in practice. This possibility is likely to increase when the statements of goals are of a very generalised kind and perhaps of an ideological nature. There is some evidence that this is the situation at Countesthorpe, where the long term educational objectives of the staff discussed earlier are occasionally submerged beneath the more immediate concerns with control, motivation and activity of pupils. This is particularly the case with those pupils with low achievement and who do not share the dominant values of the staff. That there might be a shift from the overtly educational goals described above to goals more immediately concerned with social control can be seen from one teacher's

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14) F. Musgrove and P. H. Taylor, Ibid, p. 50

15) F. Musgrove and P. H. Taylor, Society and the Teacher's Role, Routledge and Kegan Paul, London 1969. p. 56.

comment about these difficult pupils that "though they're great big tough boys they'll sit and play with Lego(16) for hours ; I'm quite prepared to let them play with Lego - but I don't know about their parents."

Forty years ago in his classic analysis of *The Sociology of Teaching*, Willard Waller maintained that "parents and teachers are natural enemies, each predestined for the discomfiture of the other".(17) Since that time, however, it is possible that teachers and parents may have moved into closer accord. The problem is to discover the degree to which they recognise this movement.

Biddle and his associates have recently conducted a large international comparative study of teachers' role conceptions and conflicts in England, Australia, New Zealand and the United States of America.(18) Teachers in all four countries placed comparatively little emphasis on social advancement as an object of instruction, yet all saw parents as placing the greatest emphasis on this objective. Moreover, the largest gap between teachers and perceived parental expectations occurred in England. Teachers in England thoroughly disagreed with parents over the emphasis to be given to social advancement. More accurately, they thoroughly disagreed with what they *thought* was the emphasis that parents gave. These findings are strongly supported by those of Taylor and Musgrove, who also found that "teachers take an unflattering view of parents... seeing them as indifferent to moral training but very concerned with social advancement".(19) In fact, though, the teachers perceived the parents wrongly and the parents really were in some agreement with the teachers. Thus Taylor and Musgrove conclude, "teachers in all types of school see their role in moral and intellectual terms and are comparatively indifferent to the more specifically social aims of education". They go on to emphasise the great importance attached by both teachers and parents to instruction in school subjects.

Now, these findings are useful in arriving at an understanding of the parents' attitudes towards Countesthorpe. Many parents have already expressed their anxieties that the school might not meet their expectations with respect to

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16) Lego is a child's toy of inter-locking small plastic bricks.

17) W. Waller, *The Sociology of Teaching*, John Wiley, New York 1960 Edition, p. 68

18) Bruce J. Biddle, *Role Conflicts of Teachers in the English-Speaking Community* : paper presented at the 40th Congress of the Australian and New Zealand Association for the Advancement of Science, Christchurch, New Zealand, January 1968.

19) F. Musgrove and P. H. Taylor, op. cit. p. 67.

both instruction in subjects and social advancement. Their concerns have been expressed in private and in public and there have been many questions put to McMullen and his staff about these issues. Indeed, the teachers regard it as one of their most important tasks to put over to the parents the nature and purposes of the school and the long term goals held by the staff. Clearly, many parents do not find the practices of the school familiar to them and suspect that their children may be disadvantaged as compared with those who are being educated in more formal situations.

In many respects, what the teachers are experiencing is very similar to those problems faced by those who introduced progressive educational innovations in the junior schools. There is a sense, nevertheless, in which the parental anxieties might be well founded. Evidence from the junior school does suggest that children taught by informal methods progress more slowly at the beginning, but that they catch up as they get older. If, however, this pattern is reproduced in the secondary sphere then the parents are likely to express initial anxieties. Furthermore, though middle class parents are likely to understand more readily the abstract and long term goals associated with educational innovation, they are also likely to be those who are most capable of understanding the demands and constraints imposed by the occupational and economic systems upon the schools, and the necessity for their children to achieve the kind of success in education which can be publicy measured. Equally, they will be the parents who can articulate their demands and anxieties to the school, both individually to their children and their teachers and corporately through the Parents Association and the local authority. The working class parents, in so far as they have clearly defined objectives for their children at school, may be totally unable to articulate these through any form of voluntary association. There is a real possibility, therefore, that through parental differences in social class the main focus for experiment and innovation in the long run may be the non-achieving working class pupils.

Finally, consideration must be given to the expectations of the pupils. There is a great deal of evidence which suggests that under conventional, traditional arrangements, the pupils expect teachers to teach. They value lucid exposition, the clear statement of problems and guidance in their solution. Personal qualities of kindness, sympathy and patience are secondary, appreciated by pupils if they make the teacher more effective in carrying out his primary, intellectual task. As Musgrove and Taylor argue, "there appears to be little demand by pupils that teachers shall be friends or temporary mothers and fathers. They are expected to assume an essentially intellectual and instrumental role". (20) Moreover, enquiries conducted in England and America over 50 years have pointed to this conclusion. As long ago as 1896 Kratz showed that schoolchildren demanded "help in study" as the first requirement of their teachers. In the 1930s Hollis studied over 8, 000 children in a variety of schools, finding that the characteristic of teachers which they valued most highly was the ability to explain difficulties patiently. In the early 1950s Michael, in the United States, found that the older adolescent pupils regarded the teacher's method of teaching as his most important attribute. Of less importance were the teacher's personality and his mode of enforcing discipline. These findings are similar to those of Allen in English secondary modern schools. Both boys and girls were found to value most highly the teacher's competence as an instructor, his pedagogical skills.

There is little evidence from the general studies that pupils are encouraging their teachers to adopt goals which are less specifically pedagogical. Home rather than school is still the main source of expressive, emotional satisfactions. Musgrove has shown (21) that the school and its teachers are expected to meet instrumental (mainly intellectual) needs. His study of adolescents' demands of home and school has shown this sharp contrast in expectations for the two institutions. At the moment, remembering that all the Countesthorpe pupils have come from conventional schools, there is some evidence to suggest that the children are not very different from those reported in the major studies quoted. Obviously, it is the hope and the intention of the staff that exposure to the new teaching methods and procedures for control will quickly modify the expectations of the pupils as they go through the school. Meanwhile it is interesting to note that when the staff were asked which factors most constrained them in the innovations they might wish to introduce in their teaching, the two items chosen most frequently were - "Lack of Adequate Teaching Material", and "Previous Educational Experience" of children. Together these two items accounted for 55 % of the choices from a list of nine. It is possible to argue, therefore, that the teachers are facing difficulties precisely because their own concern with the expressive, pastoral side of their work is not matched by the pupils', who are

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20) F. Musgrove and P. H. Taylor, op. cit., p. 17

21) F. Musgrove, "The Social Needs and Satisfactions of Some Young People", British Journal of Educational Psychology, 1966, 36, Parts I and II.

anxious for their teachers to teach. Informal discussions with pupils suggest that this is the case ; some seem uncertain in the more unstructured situation and those who have goals which relate to academic qualifications, educational success and social advancement feel that they run the risk of having them thwarted. Similarly, it is worth noting that only 8 % of the staff are dissatisfied with the nature of relationships between children and staff in the school, yet in the cognitive, instrumental areas, 55 % are not satisfied with the operation of individualised learning in the school, and 75 % are not satisfied with the operation of inter-disciplinary schemes of work in the school.

In many respects the nature of the staff dissatisfactions can be attributed to the difficulties associated with establishment of a new school. Particularly important in this case was the fact that the builders were still on the site when the school opened, and that supplies and materials from the local authority were held up owing to unusual difficulties in the relevant department at the central supplying agency. Difficulties of this kind may well have exaggerated the problems facing the staff in respect of their teaching roles.

Another perspective on the expectations and goals which pupils have for Leicestershire upper schools can be gained by referring to some comments made by those young people of 14 who are in the high schools and are approaching the point of transfer to the upper schools. Such an investigation was conducted to run parallel to the present study. (22) The pattern of results is remarkably similar to those in the large scale studies already reported. The children who are potential pupils at Countesthorpe indicate that they have goals in the area of social mobility and recognise the part that academic qualifications will play in realising the goals. Consequently, some are anxious about the nature of teaching and the orientations of the teachers at Countesthorpe. Thus they maintain "that it will not be as good because at Countesthorpe you do not have to work if you don't want to. If you're the sort of person who wants a good job yet you cannot be bothered to work, then it is not really going to do you any good, whereas here you have to work, or else you've had it". (14 year old boy). Similarly a 14 year old girl does not think that Countesthorpe will be better than her present school, "because a lot of my friends who attend Countesthorpe say that you have no homework and that you are not worked hard. This is all needed if

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22) J. S. Gott,"High School Pupils' Perceptions of Progressive Upper Schools', an unpublished dissertation for the award of the University of Leicester, Postgraduate Certificate of Education, 1971.

you want to study 'O' levels". Others emphasise anxieties about learning - "I don't think you will learn as much, it seems a very carefree school", "It will not be as good as here, because we will not have set work", "It will not be as good because most of the teachers don't help you".

It should be noted that this kind of evidence only tells us about pupils' perceptions and does not give us real information about the learning undertaken by children at Countesthorpe. Nevertheless, it is very helpful in explaining some of the dissatisfactions felt by the staff, especially in the light of their own orientations towards education, and their emphasis on the expressive relationships with pupils. Many years ago Waller argued that the effective teacher should maintain a marked social distance from his pupils, and that he must be relatively meaningless as a person. More recently, the foremost sociologist concerned with the study of organisations has asserted that when expressive relationships are emphasised unduly, whether in a school or factory, instrumental relationships may be impaired.(23) Insistence on getting the job done might put at risk the friendliness between subordinates and those in authority ; too much concern with friendliness may mean that the more difficult tasks are never seriously attempted. At Countesthorpe, in the initial stages, there are suggestions that the staff recognise the problem. One female teacher indicates her realisation of the dilemma when she notes that what the staff have to resolve is whether they "want to be liked more than they want to be respected for what they teach or get kids to do".

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23) A. Etzioni, A Comparative Analysis of Complex Organisations; New York Free Press of Glencoe, 1971, p. 181.

Chapter III

INNOVATION AND MANAGEMENT

So far the discussion of innovation at Countesthorpe has concentrated upon the establishment and design of the school, and upon the examination of the goals, objectives and expectations of those teachers, pupils and parents who are associated with the school. Now, however, the study will describe and explain the nature of the innovations at Countesthorpe, and later discussion will investigate the working of the innovations in practice. It is important to remember that the school is, at the time of writing, little more than six months old and some of the innovatory features are not yet fully operational ; also, it is important to note that in the initial stages at least, the senior members of staff had the opportunity to exercise their power to innovate according to their own predispositions. It might be helpful, therefore, to be reminded of the aspirations of those who were instrumental in preparing the initial plans for the operation of the school. "We hope", they wrote in an early document, "to educate children for the world they will live in, the world of 1975 to 2025 - not for the world of the last fifty years ; we believe this means the all-round development of brain, personality and body. To think rather than to memorise ; to develop high skills in all forms of communication - in speech, in social communication as well as in writing and reading ; in attitudes to themselves and to others that will enable them to cope with, and contribute to, the changes in standards of private and public behaviour ; to earn a living in a world in which work, for some, becomes increasingly technological - and in itself subject to change - for others, involves greater contacts with people, and for yet others, becomes duller in content and shorter in duration ; to develop interests and abilities of all kinds to enrich their leisure time ; and finally, to enable them to participate in making sensible decisions in their work and play, and in the community". In order to attain these wide-ranging and multifarious aims a variety of new ideas has been put into practice at Countesthorpe. Each on its own is probably not totally novel, though the accumulation of innovation in one school most certainly is. The innovations may be considered under broad titles ; the learning, the curriculum (subjects and contents), the organisation, staff relationships, staff-pupil relationships, and relationships with the local community.

The innovations in respect of the curriculum and time-table arrangements have been far-reaching. The time-table has been set up so that the chronological teaching unit is longer than in most schools. The day is split into four periods, two morning and two afternoon, whereas the normal division in English schools is into six or seven periods a day. At Countesthorpe, therefore, each lesson is about 80 minutes long. In the initial planning stages most of the staff accepted that long spans of time would be more appropriate to the kind of work they wished to undertake, for it would enable more integrated subject material to be studied and also make for greater flexibility in the grouping of the pupils.

Furthermore, in order to encourage children to work independently and to exercise choice in their own work, certain periods of the week have been set aside for "independent non-timetabled study time". As the staff proposed in their early plans, "this is to encourage the ability in children to work by themselves, to show initiative, and to plan work ; it is therefore necessary to ensure that this does not involve too much staff guidance and supervision". In fact, this policy of independent work time only serves to symbolise the great emphasis within the school on individualised learning and group work. In the school as a whole, class teaching on a didactic fashion is at a minimum. As a document dealing with suggested practical applications of the overall organisation of the school indicates, though class teaching might be efficient for imparting knowledge of a limited nature to homogeneous groups, it will not achieve adequate results when the full range of objectives are to be achieved, and where the groups are not homogeneous. It also limits the kind of motivation that can be aroused. It should be noted that there are hardly any academically homogeneous groups at Countesthorpe. The staff, then, postulate three main learning situations :

a) The student works by himself from or on various media.

b) A small group of children work together : a pair up to five making a small group.

c) A seminar-group work with a teacher ; perhaps up to fifteen children, and occasionally large teaching groups for films or lectures.

Various mixtures of the arrangements are recommended in this initial advisory document for staff, it being argued that the exact mixture of methods desirable will certainly vary from subject to subject, from group to group, and even from individual to individual. Now, individual or group methods for teaching have been proposed by many different educationalists throughout this century, but although in the last twenty years such methods have been widely adopted in English primary schools, it is unlikely that any secondary school has embraced the principles of individualised learning to the extent of Countesthorpe College.

Inevitably, such an approach to learning relies very heavily upon the production of materials upon which the children can work. At Countesthorpe, individualised learning in all fields is closely dependent upon the production of work sheets. In some cases these worksheets are available from commercial sources, or have been made available through some central educational agency. When this is the case then the teachers can use what is presented or modify the worksheets for their own purposes. Thus the Mathematics Department is using material based on modified School Mathematics Project materials and a BBC programme. The teachers in the humanities areas are using both Nuffield and American materials. One fourth year option on control technology is based upon Project Technology, and another on computers on a course built up by the computer firm itself. As has already been indicated, a very high proportion of the staff with teaching experience perceived themselves as having been involved with innovation in their previous schools. In the majority of cases these innovations were concerned with the production of materials upon which the children could work. In many respects therefore, both in terms of the earlier experience of the staff and the widespread use of centrally produced pre-packaged material, many of the plans at Countesthorpe are made possible as a result of the innovation that has already happened in schools in the past few years. Nevertheless, since Countesthorpe takes these plans very much farther, and the existing materials are not as yet sufficient for their operation, it is a vital part of the staff's task at Countesthorpe to produce new materials. Clearly this is viewed as a major concern, as the document already quoted on the practical application of the advice for staff sternly reminds the teachers that "it is important that the initial generous staff ratio, which is given to all new schools for the first three years, is not used to reduce group size but to make materials". Nevertheless, the shortage of technical staff at the school has placed even greater responsibility for the production of materials upon the teaching staff.

The emphasis on individualised work sheets stems from the goals of the staff with respect to the motivation of the children, and the concern to let the pupils work at their own pace. The pupils can proceed through the worksheets at their own rate, under the guidance and supervision of the staff. Those who are capable of quick and accurate work will cover more material, or the staff will have the flexibility to provide them with more detailed and advanced work in the fields in which the rest of the group are engaged. Obviously the content of the work sheets will differ between the various subject areas, but the aim is to achieve a full coverage of approaches to learning. Thus, some worksheets are almost "self-contained", the sheet offering the pupil certain types of information and following this up with questions designed to explore the child's understanding of the information and, perhaps, provide him with the opportunity to discuss the material in a new context. Alternatively, the latter part of the worksheet might suggest a short project for the pupil to follow up the original information. The project will be such that the pupil will be required to draw upon his own initiative and motivation in order to pursue material contained say, in the resource area and library. In science the worksheets are frequently more practical. They enable the pupil to set up an experiment and guide him through the observations and measurements necessary for its completion. Moreover, the worksheets can be developed in such a way as to enable a group of students to work collectively on a project. Obviously, in terms of the stated goals of Tim McMullen and many staff, individualised learning of the kind described is an important educational innovation. It is well to remember, however, that its success or failure is very dependent on a range of technical facilities being available for the reproduction, storage and retrieval of material, upon the skill and energy of the staff in preparing new and stimulating work sheets, and upon ancillary staff. In fact the school is excellently equipped to handle the production and retention of the necessary sheets, though short of technicians to support the teaching staff. At a technical level there are few problems, though at a creative and operational level individualised learning and the preparation of material have brought many difficulties. These will be discussed later, when a description of all the major innovations in the school has been completed.

Associated with the move to new perspectives in learning there have been many changes in the curriculum of the school, mostly involving moves to more inter-disciplinary work. Since the curriculum has been planned to a large extent by McMullen, it reflects his views that have already been discussed. In its most novel aspects McMullen has actually invented new descriptions for certain parts of the curriculum. The whole point of the innovations, says McMullen, "is to avoid giving the traditional message". Essentially, the curriculum is divided into seven areas, four of which are recognisable in conventional terms - Mathematics, Science, Languages and Physical Education - and three of which embody radical moves to interdisciplinary activities. In the language of the school these three areas are C. W.; 2D and 3D ; and I.G. C.W. represents Creative and Expressive Words, Music and Drama and encloses that group of studies normally associated with English and Literature. 2D and 3D stands for Creative and Expressive two and three dimensional Arts and Crafts (which includes Home Economics). I.G. stands for the Study of the Individual and the Group which has replaced the conventional History, Geography and Social Studies. In addition to the inter-disciplinary approach through the merging of traditional subjects within the new boundaries, it is hoped by McMullen and his colleagues that there will be much co-operation between Departments. Thus the document of practical advice for staff reminds teachers that, "Timetable and accommodation make staff co-operation easy ; what form it takes can be left to the groups concerned - it can vary from interchange of material and ideas to planned team-teaching. It would, however, be a waste if staff did not find ways of sharing their expertise and knowledge ; it would also be a pity if the opportunity that exists for children to exercise some choice of whom they find easiest to relate to was lost". According to this argument, therefore, the inter-disciplinary work has not only academic advantages but is clearly seen as a means of enhancing pupil-teacher relationships in the school. Background papers, prepared by the staff, setting out in great detail the purposes and nature of the inter-disciplinary work in the school are evidence of their interest in this area. The staff are anxious, in their initial aspirations, to prevent the new areas building up walls around themselves, and the working paper explicitly urges the Warden, Tim McMullen, and the Director of Studies for each area to take means to prevent this happening. In addition, the staff are presented with ways in which the inter-connections between the areas of study can be demonstrated. The document expresses hopes that the C.W. and I.G. departments should be working together and sharing staff, and suggests that they will ultimately merge. It indicates the links that might exist between the teaching of foreign languages. More particularly, however, the possible areas of co-operation between the two main sides of the curriculum - the Humanities and the Sciences - are clearly stated :

i. Between the Biological Sciences and the Study of the Individual and the Group - both from the point of view of the physiology and psychology of man, and also the nature of the environment - particularly in relation to the pollution of the environment.

ii. Between the Physical Sciences and the Design section of the Creative/ Expressive Arts and Crafts work, in creative technology and design.

iii. Between the Mathematics studies and the study of the Individual and the Group in relation to statistics.

Furthermore, the staff document dealing with the academic organisation gives more detail of the work and structure of the I.G., C.W. and 2D and 3D. The study of the Individual and the Group is envisaged as embracing the student's understanding of himself, of his relationships with those he works, plays and lives with, both present, past and future. It will, therefore, include the understanding of the society he lives in - its social groupings, its political structure, its legal system, its general ethical and moral system and the relation of this to the pupil's personal moral code. Other fields of study will include the economic organisation of society, and its relationship to the international world. Finally the course will pay "particular attention to the current major problems : prejudice and tolerance ; war and peace ; pollution of the environment".

In the field of Creative and Expressive Work in Words, Music and Movement the main emphasis is to be on actions, in writing, speaking, acting, making music, dancing and movement. The staff document reminds all that "the main point about this area is that the content is not of much importance compared to the actual activity of the students". As a result of this emphasis in integration, the staff recognise that they face particular challenges to work out the balance of teaching arrangement between the specialist teacher's requirements and his need to work in co-operation with others to develop activities that use all the skills. Finally, the advice document for staff explores in more detail the inter-disciplinary possibilities of the 2D and 3D department. Again the main emphasis is to be on action. It is noted that though there can be work which is specialist in the sense of using one medium or one craft, such an approach should be interspersed with either the creation of artefacts or environments using many media and techniques. Furthermore it is pointed out that design, technological design and construction are related and that together these will involve the Physical Sciences also. It has already been noted that certain architectural features of the school have been designed to encourage such co-operation.

It is clear, therefore, that the curriculum and many pedagogic arrangements in the school are aimed at fulfilling the goals set out earlier by McMullen and his staff through the operation of inter-disciplinary and co-operative perspectives. Nevertheless, it must not be assumed that, at this early stage in the life of the school, the objectives of the teachers are achieved in practice.

And later discussion will illustrate some of the problems and constraints facing the staff as they attempt to develop their integrative concepts.

Perhaps the innovations at Countesthorpe which have engendered the most widespread interest have been those concerned with the government of the school, particularly the staff democracy and the nature of the control relationships between staff and pupils. In one respect, of course, Countesthorpe College is like any other maintained school, that is, the external control of the school is in the hands of the local education authority, the county of Leicestershire, and the Board of Governors which it has appointed to help in the overall direction of the school. Nevertheless, there is a powerful tradition, in English education, of autonomy for individual schools. Usually this means that considerable freedom is vested in the individual headmasters, who have a great deal of control over the internal organisation of their schools. This is exactly the situation at Countesthorpe, where Tim McMullen has a great deal of independence in his handling of the internal affairs of the school. The great novelty at Countesthorpe, however, is that McMullen has refused to take on the traditional headmaster's authority. As was made clear in the earlier analysis, he is anxious to establish a participatory democracy in the school, and by so doing he hopes to achieve a number of aims : to increase the personal satisfaction of all members of the College ; to increase pupil motivation through giving them the opportunity to influence or decide their own actions in school ; to provide a model to the students of a desirable form of government ; and finally, to increase staff motivation by giving them the opportunity to influence or decide their own actions in the school.

The initial paradox at Countesthorpe, therefore, is that McMullen has employed the traditional authority of his status to divest himself of his authority within the bureaucratic organisation of the school, and though, at this early stage, pupil participation in school government is limited, there is a very strong framework of staff democracy. There are arrangements which enable the full staff to meet weekly to discuss overall policy for the school. This assembly which is the main legislative body in the college is known as the "Moot", and within the broad lines established by the meetings of the senior staff before the school opened, it is responsible for the policy making in the school. McMullen's relationship to this body is that of chief executive and he looks upon himself as the executive agent of the Moot responsible for efficiently implementing the decisions made by the collectivity of the staff. And, of course, McMullen is accountable to the local education authority for the collective decisions which the staff make.

It is obvious, however, that a weekly meeting of the total staff is an unwieldy body and to supplement its work there is an Executive Committee of senior staff which is responsible for more immediate decisions. The actions of the Committee are of course subject to the approval and ratification of the Moot. The relationships between the Committee and the Moot are not yet fully developed, and have been the subject of an almost continuous debate within the staff. Nevertheless, the uncertainties in this respect should not be allowed to obscure the thoroughgoing nature of the democratic arrangements already established. The Moot has already made a large number of decisions which in any other school would be clearly within the prerogative of the headmaster. On occasions, the decisions taken by the Moot have been different from the personal views of McMullen. Already, the Moot has taken significant steps by making decisions on the nature of sanctions in the school, children's dress, the mode of address between pupils and staff. Even more important, perhaps, the Moot has overall responsibility for the appointment of new staff and the distribution of additional salary allowances. This is a major innovation, since in almost all English schools decisions of that kind are in the hands of the headmaster and, moreover, are regarded as amongst the most vital aspects of their work by headmasters.(24) At Countesthorpe the Moot decides upon the appointment to be advertised and a committee of the staff act as the appointing body. The committee is made up of those with a special interest in the appointment either in terms of the teaching department, or in terms of the pastoral organisation of the school. McMullen is available to the appointing committee, which can employ his experience and expertise to assist in the questioning of candidates.

The overall democratic organisation of the school is reflected in the small democracies within each department, so that though each academic area and pastoral section has its own head, these leaders are expected to be controlled by the overall policies of the Moot and also to consult fully with the junior members of staff in their charge. Though the arrangements for the pastoral care of the children are not novel, they do show a very careful concern for the individual child. It is regarded as very important that each child is known with

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24) G. Bernbaum - The Headmasters - Social Science Research Council Research Project.

respect to his "whole" activities rather than just in terms of the specific skills which are likely to be demonstrated to a particular teacher. Such an attitude is regarded as especially important in a school where there is much individual and small group work and where there is independent untimetabled time, all of which could make it easier for the child to be lost or to stagnate. In order to prevent this from happening a yearmistress or yearmaster has been appointed to be associated with each year group in the school. These teachers have been chosen for their special interest in children, and their responsibility for the children in their year group is similar to that of a headmaster in a small school. They are expected, therefore, to fulfil a variety of responsibilities - knowing the academic and social progress of each child, knowing the parents' and the child's family history, dealing with parents and, if necessary, visiting their homes, helping with careers advice, establishing relationships with the local social, medical and welfare services. In order to assist the year teachers in their work, there are also a number of group tutors, each of whom will be responsible for about 20 - 25 children and will be teachers who normally teach those children in one of the major subject areas. They are responsible for the daily registration of their children, for getting to know their children very well and looking for early signs of emotional, social and academic disturbance, and are generally expected to assist the year teacher in his pastoral work.

The pastoral organisation of the school and the staff democracy are both associated with an almost total revolution (at least in the state sector of education) in the nature of pupil/teacher relationships. Pupil participation in the government of the school is at the moment restricted, partly because it is unclear as to what part they should or could play, and partly because the oldest pupils in the school are only fifteen, and pupil participation is being seen by the staff essentially in terms of Sixth Form students. Nevertheless, amongst the earliest decisions of the staff, both in their preliminary meetings and later in the Moot, were many which have transformed the nature of pupil/teacher relationships in comparison with other secondary schools.

At the time of writing there are no formal conventional sanctions at Countesthorpe. Amongst the staff there is a generalised notion of what constitutes "anti-social behaviour" on the part of the pupils. A child who is regarded as having been anti-social will be subjected to moral exhortation by the staff but without the employment of any of the usual controls available in a school - corporal punishment, extra work, detention and the like. Anti-social pupils will perhaps be made to work alone for a set period of time or will be sent to report their activities to their tutor. At the very extreme, persistent offenders at Countesthorpe might be sent home for the remainder of the day if their behaviour interferes too greatly with the work of the school. Moreover, amongst the staff there is a very great tolerance of those pupils who are most likely to be troublesome and they are especially likely to be handled most sensitively by the teachers.

The absence of formal sanctions and the attempt to obtain egalitarian pupil/teacher relationships in the school are reflected in a whole variety of symbolic forms. There are no separate lavatories for staff, and both pupils and teachers are expected to take their turn in the queue for lunch. More significantly, perhaps, pupils call teachers by their Christian names, and pupils are welcomed into the staff room, where they are frequently invited by teachers for coffee. In other respects also the school is markedly unconventional. No effort is made to keep the children out of the school at lunch or break times ; indeed, the lunch time discotheque, with pop music, soft drinks, table-tennis and darts is seen by the staff as offering a teacher controlled alternative to the potential deviance of the middle school pupils. Finally, the attempt at staff-student democracy is symbolised by the egalitarian dress of pupils and staff. In the majority of English schools both pupil and staff dress is carefully regulated by the headmasters and is frequently taken as an index of attitudes to the school. At Countesthorpe there is no uniform for the children and no regulations concerning dress for the staff. Moreover, the document on suggested practical applications for staff seems to emphasise the democratic role of the teacher vis-a-vis the pupils. Thus the teacher's main role is seen as "a guide to the individual students through the learning situation, the provider of stimulus and excitement". Staff are advised to enforce the rules by a process of constant, friendly insistence, rather than by draconic punishment or threats of such punishment, and are recommended to avoid giving the impression that children are morally deficient while the teachers are full of virtue.

As has already been suggested,the quality of relationships with, and the treatment given to, the pupils who are especially difficult are of special concern to the staff at Countesthorpe. Like any large secondary school Countesthorpe has a small proportion of pupils who have extreme emotional or academic problems and do not fit readily into the everyday routine of the school. The problems arising from these pupils can be particularly acute in Leicestershire where there is below-average provision in special schools for educationally subnormal and maladjusted children. Any ordinary secondary school, like Countesthorpe, will have to cope with a few pupils who have severe learning or emotional difficulties.

In most schools such pupils are extremely troublesome, sometimes functionally illiterate and therefore unable to participate in normal classroom activities, or totally unable to adjust to the pattern of authority and control in a school. At Countesthorpe, special arrangements have been made for children of this kind. An extremely experienced teacher has been appointed to be responsiblefor them. The teacher has no formal time-table duties and these difficult,"non-involved" children, therefore, can be given specialist attention. More important, they can on occasions be part of a normal academic teaching group if they wish, or can be withdrawn at very short notice from school routines as the specialist teachers are readily available. Two large rooms are set aside for these pupils and the teacher in charge is involved in modifying and rewriting material produced by other staff in order to make it more suitable for the children she is concerned with. In this work she is greatly aided by three synchrofax machines which the school has and which enables a highly individual approach to be adopted with these children. The tapes last only four minutes and are much easier to handle than cassette types. Perhaps one should note that the teacher in charge of these children does not make great claims about the novelty of anything she does with the children, but chooses to emphasise her availability "to take, take and take, until the children trust you as a person - the approach is not unique but the amount of times spent on them is".

Finally, the school at Countesthorpe has been designed to serve as a community college, and to make an important impact on the local village. The concept of a community college is not new, and several authorities, most notably Cambridgeshire, have experimented in this direction. Although Leicestershire itself already has several in operation, in the main the community college work is confined to the latter part of the day ; after the children have left the school, evening classes for adults begin and these are not necessarily taught by members of the school staff. At Countesthorpe the arrangements will be different and to some extent are already so. There is a section of the College designated for special, but not exclusive, use by the adults, and facilities for refreshments and recreation exist. It is anticipated, therefore, that adults will use the facilities of the school during normal school hours, and that to some extent they will work alongside the pupils. When the plans are fully developed it is hoped that such activities will make a notable contribution to the understanding of the innovations which the staff propose for the children, and also enable closer teacher/parent contact. At the same time, of course, a notable encouragement will have been given to community life.

The main innovations, as defined by the staff, have been carefully described in the preceding sections. It is essential to remember, however, that whatever are the ideologies, goals or even definitions of education their transmission occurs in a social context. It is vital therefore, to understand the operration of the innovations in the social context of the school, in order to fully comprehend the constraints, problems and achievements involved in the new practices.

Chapter IV

THE SOCIAL CONTEXT OF INNOVATION

The study so far has examined Countesthorpe College in the context of the administration of the County of Leicestershire and the social background of the village of Countesthorpe, and has given an account of the ideologies, goals and objectives of those who work in the school, most especially of those who have power and autonomy, namely the Warden and the staff. In addition, it has described indetail the major innovative features of the school. As the school is, at the time of writing, designed for innovation from the beginning, it is impossible to examine how the innovations have changed the roles and behaviours of the personnel. However, consideration can be usefully given to several significant factors relating to the major innovations : the degrees of satisfaction they have brought their proponents ; the constraints that have been operative in modifying initial plans and aspirations : and the unintended consequences that have been brought about by some of the proposals. At all times this examination will be made not only in the context of the school and neighbourhood, but in the light of the theoretical frameworks and empirical studies of the relevant social sciences. For this purpose, then, four major innovations have been chosen for closer inspection - individualised learning, the inter-disciplinary curriculum, staff democracy, and the move to greater equality in pupil/teacher relationships.

Throughout, however, it must be remembered that this exploratory study was undertaken in only the second term of the life of the new school. In its early months the school was faced with many unusual problems. Notably, the delay in the completion of the building which meant that major works of construction were still being undertaken when the pupils had already arrived, and that not all the school was available for use. At the same time it should be remembered that the local authority supplies department was going through an unexpected administrative crisis which severely curtailed delivery of vital materials to the school. In both these respects, therefore, the school started in a very disadvantaged position as a result of circumstances completely beyond the control of those who worked in it. Moreover, for its first few years Countesthorpe College is in an unusual situation. The school has been designed for pupils between the ages of 14 and 18, and will eventually be for such pupils. At the beginning, however, the school contains pupils between 11 and 14. Consequently, the immediate arrangements are somewhat temporary. It is very likely, therefore, that all these circumstances have combined to present atypical problems to the staff. Certainly, any analysis of problems, constraints and dissatisfactions must, at this stage, be of only a tentative nature.

Over half the teachers (55 %) at Countesthorpe are not satisfied with the operation of individualised learning at the school. Significantly the evidence(25) suggests that it is the older, more experienced teachers who are less satisfied in this respect than the young teachers, and that male teachers are less satisfied than female teachers. Sources of dissatisfaction fall into two categories, doubts about the ability and opportunity of the teachers to prepare adequate material, and doubts about the effectiveness of the material prepared, particularly in its usefulness to motivate all the children. Over and over again the staff give indications that there are problems of preparing the work sheets so vital for individualised learning - "In our department, we have not enough time to prepare enough interesting and varied material", "Nowhere near enough time or resources to adequately occupy all the children all the time according to their individual needs". Problems of this kind should not be underestimated. The production of imaginative and stimulating work sheets on a regular basis requires immense skill and a considerable sense of purpose over a long period, and demands of the teacher a long-standing commitment and involvement with a large part of his professional personality.

Furthermore, there are difficulties with the individualised approach to learning even when the worksheets have been produced. Essentially these difficulties arise because the motivation of the pupils cannot be taken for granted. It appears, then, that these approaches demand from the pupils an equivalently high degree of readiness for commitment, and it must be questionable whether it is reasonable to hold a uniform perspective on all pupils in this respect. If the pace of learning is to be virtually in the pupil's control then the conditions which are operative to determine the pacing are very important. In turn, these conditions are likely to be a function of the previous socialisation of the child. What is often ignored in this respect is that middle class family socialisation of the child is a hidden subsidy, providing both a physical and psychological environment which immensely facilitates, in diverse ways, school learning. Where the school system is not subsidised by the home, the pupil often fails. As one teacher neatly puts the problem "Some children just can't discipline themselves to work ..... the drawback with our system is that the children who need to do the extra work are the ones who don't do it; the children who are interested and are good are the ones who go on and do more".

There is evidence that McMullen is aware of the problems in this area, for he has observed that, at this very early stage, he thinks that the school is working well for the most able and motivated pupils, and that the care and attention devoted to the minority of pupils with severe emotional or learning difficulties is having its reward. He is, however, anxious that the great mass of the children "in the middle" are not ignored as they can readily be when so much depends upon their own initiative. The problem of motivation in a system of individualised learning is crucial and unless the teachers are remarkably skilful, energetic and imaginative real differences will appear in the children's academic performance largely on lines determined by social class differences. As has been suggested, there are signs that the teachers are already experiencing some of these phenomena, as is indicated by their expressions of anxiety over worksheets and the problems over the motivation of the children. Thus, when offered nine items from which to choose those factors which might constrain them in the innovations they wished to adopt, 30 % of the choices were for "lack of adequate teaching material", and 25 % emphasised "the previous educational experience of the children". Together, therefore, the two items account for 55 % of the choices, the remaining seven factors only receiving 45 % of the selections. As an experienced teacher suggests, "It must be an enormous shock for the children to have to think for themselves". There is, however, a risk that the pupils in the school will show a tendency to polarise - some getting on with the academic work as the staff have prescribed, and these will contain a large proportion from middle class homes where the notions of learning and individual self-control are encouraged, others making little academic progress, because they find little support for this in their immediate sub-culture, or may have arrived from their previous educational experience deficient in the necessary skills. This second group is likely to contain a large proportion of children from the homes of the unskilled manual working class. It should be noted, however, that as the school gets older some of these difficulties might diminish. Firstly, the present intake of the school contains an unusually large proportion of working class children ; as under a special arrangement with the City of Leicester, the children from a nearby council housing estate have been temporarily admitted. Secondly, as the school becomes established the proportion of new entrants to the total population will drop.

Nevertheless, even when the school operates under more normal circumstances the individualised learning will involve something of a withdrawal by the teachers from the role as it might be defined in terms of the pupils' expectations. The pupils tend to emphasise strongly the instrumental features of the teacher's role ; simply, they expect him to teach and to be responsible for control, and are less concerned with the teacher's personality or the expressive aspects of his work. It is possible, of course, that the pupils are in error to accept these perspectives. Nevertheless, they are real and powerful and can only be ignored at risk to the learning climate of the school. Clearly it is possible to argue that the pupil's expectations must be modified, but it is a complex empirical question to decide how this is best done, and under what conditions attitudes most readily change. It means, of course, that one of the major long term empirical tasks will be to examine the way in which the new relationships established in the school will modify the expectations and assessments of the pupils.

As has been seen, also, a further important feature of the work at Countesthorpe is that the teachers see themselves as models for the young, in that they wish to achieve their objectives by example. Thus, as has been argued, if the staff are seen to be rational, liberal, democratic and co-operative then their influence will spread to the pupils. The studies, however, of this modelling process do not testify to its overwhelming effectiveness. An investigation into origins and nature of the socio-moral values of 16 year old boys and girls in a American city revealed parents rather than teachers as the significant determinants of the character of the young. Indeed, teachers appeared to have a negligible influence. The report on the study concludes,

> "another clear implication is that parents cannot reasonably expect to turn over very much of the character training of their children to other people, whether in school, church or youth organisations. By the very nature of character formation, no one other than parents can ordinarily have one-tenth of their influence ; and if the parents are continually reinforcing their own influence by their day-to-day treatment of the child, other adults can have little expectation of outweighing the parents' influence. Dramatic exceptions to this rule are known, to be sure ; but they are dramatic precisely because they are so rare and so hard to achieve. No such exceptions occurred in the Prairie City group, during the study". (26)

Similarly, an attempt to discover the extent to which English secondary

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26) R. F. Peck and R. J. Havighurst, The Psychology of Character Development, New York, John Wiley, 1960, p. 190.

school children identify with their teachers has led to the same conclusion as the American 'Prairie City' inquiry. Wright (27) investigated the self-concepts and the perceptions of parents and teachers among 105 15-and-16 year-old secondary modern school children. He concluded that, "in their last year at school secondary modern pupils are a good deal less identified with their teachers than with their parents". The pupils, it seems, value their teachers mainly for their intellectual abilities ; they are little concerned with their more general human qualities. Thus Wright points out that, "In so far as the pupils do identify with teachers, it is restricted to those aspects of personality which relate to academic achievement. They admire teachers for their cleverness and knowledge. But they do not seem to value them highly as persons". As with the report on Prairie City's adolescents, Wright emphasises the influence of parents rather than teachers ; "it is of interest to note", he writes, "that the opinion sometimes expressed that adolescents are, in general, rejecting parental influence, receives no confirmation". Finally, Wright is sceptical about the efficiency of the wider, less specialised role that is frequently ascribed to teachers, an ascription which has been shown to be central to the functioning of the arrangements at Countesthorpe. He points out that "there has been a tendency in recent years to place increasing responsibility on the teacher for such things as mental health, attitudes, values and social awareness of adolescents". Yet there are no indications that pupils expect those services from their teachers or that when they are rendered they have much effect".

The studies, therefore, tend to emphasise the influence of parents and to devalue the potential impact of schools and teachers. In emphasising parents the research findings are, of course, implicitly and explicitly pointing to the links between social class and the socialisation of the child. There are numerous enquiries which reveal the differences in socialisation between the social classes and the way in which position in the social structure and induction into certain value-systems offer different opportunities to profit from the educational system. Critical to this process might be the future orientation of the middle class, whose elaborated language codes not only make the language of learning more readily available to them, enabling their children to be more flexible in the learning situation and to switch roles more readily in response to new contexts, but also provide the greater sense of uniqueness and individuality developed by

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27) D. S. Wright, "A Comparative Study of the Adolescent's Concepts of his Parents and Teachers", Educational Review, 14, 1962.

a middle class socialisation. As argued, therefore, there is a real possibility that the teachers at Countesthorpe might encounter problems from those working class children whose academic success is not likely to be great, whose values will not embody large elements of rationalism, liberalism, or tolerance, who will not be able to perceive, or at least realise, the long term goals inherent in the pedagogy and curriculum of the school, and who will not be able to manifest that flexibility necessary to switch roles in new situations. There are signs that this is already the case.

The problem of motivation with respect to individualised learning has been considered and the difficulties of the staff discussed. It is clear that this method of learning, in which the pacing is essentially that of the pupils, alters the balance of power between teacher and taught. The nature of teacher-pupil relationships at Countesthorpe and particularly the absence of traditional sanctions possibly serves to generalise this problem, since, without a formal structure of support, the teachers must rely on their personalities to manipulate and control the pupils. In turn, this can give rise to much anxiety and, frequently, doubt.

It is important to recognise from the beginning that the nature of relationships between children and staff in the school, and the sanctions available to staff are the matters which present difficulties to the staff. Thus, although about 28 % of the staff claim to be very satisfied with the nature of the relationships in the school, exactly the same proportion claim to be not satisfied with the sanctions available. It is interesting to note that in the second three months of the life of the new school much attention has been given to the question of sanctions, the result being a general "stiffening" of the staff's approach to pupil-teacher relationships and the insistence of sanctions. Nevertheless, there are distinct differences between the sexes in these areas. Whereas half the women teachers are very satisfied with the pupil-teacher relations in the school, only about 15 % of the men are. Similarly, the men are less satisfied than the women with the sanctions available in the school. These findings must be seen in the light of the fact that females choose "greater equality in social relations between staff and children" as the most important innovation in the school. Their satisfaction in this area, therefore, is likely to be a reflection of their orientation towards teaching in an expressive rather than an instrumental fashion. They have probably come to the school precisely because it offers the opportunity to enter into more expressive relationships with children. As one young female teacher succinctly remarked. "It's becoming increasingly obvious to me that

I'm far more concerned with children than I am with mathematics". Since, as has already been shown, it is the men who place more emphasis on learning, it is not surprising that they are less satisfied with the absence of sanctions and the quality of pupil-teacher interaction, because it is these factors which they are likely to perceive as inhibiting and restricting the extent and quality of academic learning in the school. Repeatedly the staff, other than those who claim to be satisfied in these respects, express their anxieties over the question of sanctions .... "The present situation on sanctions is absurd and unrealistic, given the society in which the children live and the present age range of children" ; "My own personal relationships .... are O.K. - but when it comes to enforcement of social behaviour, things grind a bit" ; "The teacher has been deprived of all means of enforcing his authority in the learning situation with the result that a few children can effectively destroy whole lessons for the rest" ; "More positive sanctions are required". Other teachers, especially in the 2D and 3D practical subjects, indicate that the absence of sanctions can create particular problems for them in dealing with dangerous tools and machinery ; as the Head of Design put it "We have found some very real problems in simple control. I'm thinking of things like safety when dealing with craft work, for instance. Can we maintain standards of safety and a general agreement with the ethos of the school ?" It is reasonable to suggest, however, that this particular difficulty symbolises a more general dilemma arising from the absence of traditional sanctions and the operation of the staff democracy ; - a dilemma which was particularly acute in the earliest weeks of the school's existence. For in such a system, there are no clearly defined arrangements which can serve to guide the staff in their relationships with pupils. As already suggested, much depends on the individual qualities and attributes of the teacher, and in the terms of the earlier analysis, upon the individual qualities and attributes of the pupil. There is a sense therefore, in which much more of the personalities of the participants is made public than under traditional systems of school authority which reinforces that which was indicated earlier in reference to individualised learning, that it is likely to involve more of the pupil's character being open to inspection and to manipulation - more of his thoughts, feelings and values. Yet the same is true for the teachers, as they are increasingly beginning to realise.

The realisation on the part of the teachers at Countesthorpe that, in the earliest stages, the idiographic elements in social relationships counted for more than the nomethetic arrangements in the school took two forms, There was their awareness of their own isolation, and growing out of this, their dependence on the involvement, commitment and skill of all their colleagues. Yet just as these qualities could not be taken for granted in their pupils, equally they could not be guaranteed in colleagues. The teachers recognised the situation ; "Any discipline here has to come from the personality of the member of staff concerned" ; "Some are worried because it is not structured enough here. Some people cannot stand on their own feet" ; "I think it all depends on the teacher, how expert he is at handling the situation" ; "Natural approach combined with freer structures means that often chaos is the result. My own relationships with children probably better in a more formal set up". The teachers also recognised the way in which the system placed additional responsibilities upon them, "Technique of constant insistence on social behaviour more wearing for staff and having mixed success" ; "There is doubt about what is 'on' and what is 'not on' which makes for confusion and leads to general laxness" ; "The absence of sanctions tends to obscure the essential responsibilities of a teacher. We are not always honest and consistent in our jobs ..... A lot of teachers need to achieve self-discipline before they can impart it to the children". Occasionally, a teacher's comment goes right to the source of the problem. Thus, one teacher noting the lack of sanctions on the part of the staff dealing with children, also draws attention to McMullen's denial of traditional authority by his refusal to sanction staff ; "It must be very difficult for Tim, he's got to rely on people's good will. Psychologically, for him it must be very demanding especially having been a head previously. The whole thing puts much more on people's self-discipline, in which we fall down all of us. We get tired, and do not do what we agreed to do". Clearly circumstances such as those described have been very instrumental in bringing about a greater availability of sanctions in the school and a greater willingness to operate them, both of these developments being features of the more recent changes at Countesthorpe.

Just as the lack of sanctions and the absence of the traditional authority of the head place greater emphasis on the commitment and ability of the individual teacher, so the inter-disciplinary and group teaching schemes tend to expose the teacher to public view and to emphasise his dependence upon the others in the team. The main point about integrated arrangements is that there must be some relational idea, a supra-concept, which is designed to draw students' attention to knowledge at a high level of abstraction. Whatever the relational concepts are, they will act selectively upon the knowledge within each subject which is to be transmitted. The particulars of each subject are likely to have reduced significance. In turn, this will lead to an emphasis upon, and the explorations of, general principles and the concepts through which these principles are obtained. As has been shown, these are the goals held for learning at Countesthorpe, where the programmes of work are such that the children are not meant to be given too much detailed information or too many facts, but are encouraged to explore the principles involved and perhaps "experience" the subject. What is not always recognised, however, is that this, in turn, is likely to affect the orientation of the pedagogy, which will be less concerned to emphasise the need to acquire states of knowledge, but will be more concerned to stress how knowledge is created. In this way integrated arrangements, at least at an ideological level, make readily available to pupils the principles for generating new knowledge. Part of the underlying theory of the integrated code is to encourage learning which is self-regulated, a feature which is demonstrated at Countesthorpe. The inherent logic of the integrated curriculum tends to create a change in the structure of teaching groups towards the adoption of considerably flexibility. In this way also,therefore, integrated codescome to modify authority relationships by increasing the rights of the taught. Such developments are clearly anticipated at Countesthorpe where the document on practical applications for the staff describes the role of the teacher as, "one of a group, comprising students, ancillary staff and colleagues creating a learning situation ..... one of the very many, and by no means main, sources of information and explanation".

It is likely, however, to be just these aspects which present most problems to the staff at a practical level. In an earlier section it was shown that the expression of objectives set out for the various parts of the curriculum provided no real guide in behavioural terms to what could be expected from pupils and staff. In a sense this is to be expected, for, as with worksheets, it requires great skill and knowledge as well as commitment to devise a truly integrated scheme of work. Detailed knowledge of a range of subjects and the concepts which make up their organisation of knowledge is essential, if the integration is to be effective. Moreover, the teachers must be prepared to yield some of their identity in terms of their original socialisation by subject, and to genuinely recognise the enhanced power position of the pupil in the learning situation. At Countesthorpe these things have been difficult to achieve. That only 11 % of the teachers rate it as the most important innovation suggests that the inter-disciplinary curriculum has not been rated highly by staff. More significantly, perhaps, 75 % of the staff are not satisfied with the inter-disciplinary schemes in the school, and not a single teacher admits to being "very satisfied". Thus the teachers comment, "There is no co-operation between the umbrella disciplines" ; "There is no inter-disciplinary work here, and no real concept of what it is or involves" ; "Each area has tended to be so intent on establishing itself that it has not been able to look outwards yet"; "Relieved that integration has gone no further at this stage"; "Very little integration is taking place between science and other things. Between the sciences there are problems with teachers not having enough knowledge in the other fields to integrate". Moreover, there is a certain ambivalence on the part of the staff to the inter-disciplinary activities, perhaps because they define them as the least successful innovation. Thus, at an interview session with a group of teachers being considered for a vacancy at the school, a very senior member of staff describing the curriculum to the candidates noted mockingly that "I. G. is staggeringly similar to Humanities and C. W. is remarkable similar to English".

Thus, it has not been easy to move the school in the direction of inter-disciplinary activities despite all the original aspirations. Most of the effective inter-disciplinary work is within the departmental areas, as yet ; it is the departments which have been unable to establish a real co-operation and dialogue between each other. The traditional subject loyalties die hard. It is into these that the teachers have received their adult socialisation. It is their subjects which have given them their sense of identity and which, in the main, they are forced to utilise in the wider society to establish and promote their careers. Moreover, from the pupil's perspective, most public examinations are in traditional subject areas and there will be constraints upon the teacher not to move too far from these, especially as the pupils get older. To move wholeheartedly into fully integrated work, therefore, perhaps exposes the teacher to the greatest risks.

Finally, consideration must be given to the operation of the staff democracy. Though many teachers are very excited about the democratic arrangements, "I love it . . . absolutely unique", they nevertheless look upon it as the least important of the innovations at the school, in fact only 5. 5 % regard it as the most important innovation. Furthermore, there are clearly problems in the operation of a staff democracy, as only 5 % of the teachers claim to be "very satisfied" with it, whereas 45 % are positively "not satisfied".

The sources of dissatisfaction are various. Many teachers resent the cumbersome and time wasting machinery that is part of the democratic process. "Committed to staff democracy but find the time consumed by unwieldy process very worrying" ; "Long, laborious, time-consuming"; "It has a negative value in terms of efficiency. It needs streamlining"; "There is so much time consumed in decision making"; "Staff democracy does go to the head of some staff who behave as if they are in the Oxford Debating Society rather than a school ! ".

Part of this problem undoubtedly stems from the fact that the arrangements are newly established and there has been a period of trial and error. Even more important, perhaps, has been the novelty of the situation for the majority of staff. For most of them the experience is unique and it is bound to take time before they can establish command of the form and principles of debate in this new context. One of the difficulties is that the democratic-liberal principles underlying the establishment of the Moot have been carried forward into its operation ; this has, inevitably, blurred the process of decision making and produced a sense of unreality. Because there is no regular chairman, and no regular secretary, the form of debate is frequently unclear and there are inadequate minutes and records of decisions. Traditional procedures tend, in fact, to be reversed at Countesthorpe ; the actual agenda is sometimes disregarded while the important matters of an immediate kind are discussed first at the Moot, under the heading of Any Other Business. As one experienced member of staff notes, "I'm very disappointed at the way the Moot is run, too many ideas are given off the cuff, we don't know what's going to come next". Staff opinion such as this has been important in bringing about recent changes in the Moot. It now meets less frequently but operates on a more formal level, with a carefully prepared agenda and minutes.

Another problem deriving from the arrangements described is that it is very difficult for the whole of the staff to take anything but radical educational decisions. As has been shown, the staff have been recruited partly because of their progressive and innovative orientations, which means that, overall, they are likely to be committed to educational change. Moreover, as has been shown, the staff are, above all, involved in the nature of social relationships between teachers and pupils, an involvement which makes them unwilling to resist radicalism overtly in this field. It is, apparently, awkward for those who have doubts about the rapidity of some of the changes to state them, let alone make their doubts effective in action, without appearing conservative and traditional, and in some sense striking at the whole foundation of the school.

This pervasive radicalism becomes a source of a twofold set of problems both outside and inside the school. As has been shown, the most extreme radicalisation has taken place in the field of staff-pupil relationships and the withdrawal of sanctions, and it is these features of the school which have attracted the most criticism in the local community and press. On the one hand, the response of the extreme progressives amongst the teachers is that they must not react to "every nervous twitch in the local community"; on the other hand, Stuart Mason and McMullen have expressed anxieties that there might be a local "backlash" which would endanger all the worthwhile educational works of the school.

A second consequence of the Moot's radicalisation of staff-pupil relationships is that it starkly emphasises the commitment and skill of each individual teacher, in the manner described earlier. This cannot be guaranteed, as one teacher observes, "the staff do not act on what is decided". The consequence is, therefore, that inter-personal relationships within the staff can become subjected to severe strain, as teachers are accused, privately and publicy, of inadequately performing their responsibilities, and so making the work more difficult for everybody else. Group teaching and open architecture only serve to highlight the problem. Moreover, the tension is likely to be greatest in precisely those areas, which because of the control element involved, are the "dirty work" of teaching and most likely to bring the teachers into contact with the deviant pupils - supervision of pupils in classes, at play, at dinner, observation and control of truants from class and school, admission of pupils to the staff room. In conventional and traditional schools such problems also arise. They tend, however, to be focused upon the role of the headmaster, and especially what the staff regard as his inadequacies and weaknesses. In a sense, therefore, the difficulties may serve to unite the staff in their hostility to the head. At Countesthorpe the staff democracy ensures that the responsibility is that of the teachers. As they increasingly find, responsibility can be difficult and problematical as well as rewarding.

Some staff are disturbed by certain oligarchic tendencies which are manifest in the operation of the democracy. As a young female science teacher puts it, 'I think it began well, but as time goes on the 'Chiefs' find it harder not to slip back to old habits". Complaints about oligarchies are commonplace in most democratic systems, and at Countesthorpe some of the staff are prepared to express them. As shown in an earlier section, there are difficulties in the relationships between the Moot and the Executive, and McMullen with his much greater experience and expertise is clearly deferred to in a way in which other members of staff are not. There is a real sense in which he is "primus inter pares". Nevertheless, certain aspects of the democracy, like the appointment of staff, are very thorough-going and unique, a feature which many of the teachers appreciate. In these initial stages, at least, more of the staff are worried that democracy is endangered by demagoguery than by obligarchy !

In examining in detail the social context of four of the major innovations this study has attempted to look at some of the realities of innovation in order that those who wish to follow the progress at Countesthorpe might be made aware of the kinds of problems and difficulties which are likely to arise. This seems to be the real purpose of a case study, and accounts for the attention given to the social and organisational constraints upon innovation. It is possible, as is shown by other studies, to describe the ways in which traditional schools adjust to their internal and external realities(28). None of what has gone before is meant to decry or deplore innovation at Countesthorpe College, but only to set it in its social context. What remains, then, is to consider the limitations of the present findings and to review the future possibilities both for the school and the research.

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28) See, for example,
D. Hargreaves, Social Relations in a Secondary School, Routledge and Kegan Paul, London 1967.
J. Partridge, Middle School, London, Gollancz, 1966.

Chapter V

A DISTANT PROSPECT OF COUNTESTHORPE COLLEGE

In conclusion, it is necessary to consider the future of Countesthorpe College. The reservation which must be made, on account of the limitations of the present study, will be noted, and significant areas of speculation indicated where further, thoroughgoing research would be helpful to both the educational process as a whole and educational innovation in particular.

As already pointed out, the teachers at Countesthorpe are convinced that their school is "the school of the future" - almost 95 % agreeing with this view. Descriptions of the school in the educational Press frequently refer to the changes in education which make it likely that the Countesthorpe model will become more widely established. It is worth remembering that Mason, one of the most experienced and senior Directors of Education in the country, built the school in anticipation of trends which he believes will develop in the next few years, and in the hope that the school will not be obsolescent too quickly. He may well be right, for a recent discussion of the nature of schools in the 1980s (29) makes explicitly favourable references to the changes in schools in Leicestershire. The author, Harry Ree, Professor of Education at the University of York, describes his vision of the school of the future,

> "The railings have gone for scrap ..... there are no gates to shut. Inside the buildings the teachers have left their platforms ; they are working at desks, moving around, attending meetings, taking tutorials. If there are doors they are often open, and the walls can be replaced or removed with ease ..... Everyone comes here : pregnant mothers come to the clinic for a check up, mothers leave their toddlers at the playgroup while they go to work or attend a class or meeting in near-by rooms. Old age pensioners come to their club in the afternoons ..... There are halls, lounges and libraries, there are seminar rooms, workshops and laboratories ..... Most of the floors are carpeted, and most of the rooms have comfortable chairs ..... some of the rooms will be used by children only ; some by adults only ; a great many by both ..... private parties go on in the evening. School has regained its original Greek meaning : a place for worthwhile leisure".

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29) H. Ree, "Prospect : School in the 1980s ", Dear Lord James : A Critique of Teacher Education, ed. T. Burgess, Penguin, London 1971.

It is all remarkably similar to the ideologies which underlie the College at Countesthorpe.

Nevertheless, it is unrealistic to assume that aspirations automatically translate themselves into reality. If Countesthorpe College is to be the school of the future, then serious attention must be given to the manner of diffusion and the agents of diffusion. In turn, discussion of this kind requires a sociological perspective on the structural relationships of the educational system with the wider society, the social mechanisms for diffusion within the educational system, and an understanding of the conditions which might modify and possibly negate the original purposes of those who established, and work in, the school.

Clearly, the wider social structures will continue to exist as the context of the school, a context which is in no real way effectively under the control of the pupils or teachers. The early development and socialisation of the pupils will depend, essentially, on their families' position in the social structure and, as has been demonstrated, this early socialisation is likely to determine in a powerful fashion the pupils' orientation towards education and educational achievement. Given pupils' differences in early socialisation and the likelihood that the school will contain a large proportion of children from the working class, then the problems described earlier of control and motivation are likely to be recurring. The difficulties may increase in the near future, as the pupils get older (moving from 11 - 14 to 14 - 18) and consequently more subject to the selective demands of the occupational system and the system of public examinations.

Given the nature of our society in which education performs important functions of training and selection, it is possible to speculate upon likely changes in the school as a result of the pupils' moving closer to the externalities of the occupational system. Clearly, it is possible that the aspiration of those in charge of the school will be realised. In the long run, it is possible that the pupils will internalise the values embodied in the pedagogic relationships at the school, will modify their expectations of the "good" teacher, and that the problems of control and motivation will be much reduced ; if this happens, the anxieties of the teachers will be lessened and the exhausting "constant insistence" will be minimised. Within certain limitations, then most pupils could be expected to learn and realise their potential. In achieving this the staff would be assisted by the adoption of new, flexible, examining arrangements. These examinations would be the equivalent of the more universal Ordinary and

Advanced Levels, but would be school based and externally moderated. They would test the academic work done in the school, in the way in which the teachers had chosen to do it. In this way neither children nor teachers would be constrained by the examination system.

Nevertheless, neither the initial progress of the school nor the evidence quoted suggest that the future will be readily translated in the fashion described. For the anticipated changes to occur in personal relationships, and in pupils' attitudes, motivation and achievement will require careful and painstaking planning, and even then there are likely to be unplanned and unintended consequences.

Furthermore, one of the biggest problems faced by the staff has been the production of suitable materials and worksheets for the children, and these problems are likely to be increased if the production of materials is related to an externally moderated examination. The commitment, involvement and imagination of the staff will obviously be critical if programmes of work are to be produced which are to be sequential, have long term goals and be open to external inspection. In addition, the staff will have to be confident that the standards of their own efforts can be compared with those of the traditional examinations. If not, then the open market value to the pupils of their academic achievements at Countesthorpe will be less than those of children educated and examined in more conventional terms. Two important things follow from this analysis. Firstly, that if there is a rapid turn-over of staff at the school then the approach is bound to suffer, for the new teachers might not wish to adopt the perspectives of those they have replaced. The commitment of the staff to the school therefore, is likely to become an important issue in the future. Secondly, the individual autonomy of the teachers is likely to be curtailed, as they will be bound by the collective decision of the department about what is to be taught and the ways of teaching it. Group teaching methods, team teaching and open plan architecture are only likely to serve to emphasise the co-operative nature of the practices within the department or perhaps, school. New members of staff are likely to find particular difficulty in resisting these constraints. The effective control and socialisation of new members of staff is therefore likely to become an important issue, and possibly a source of tension, as the school develops. It is likely to be a source of tension precisely because, for new young teachers, the attractiveness of the school will be in terms of its apparent opportunities to experiment.

If it is suggested that the foregoing analysis emphasises too greatly the implications of the selective demands of the occupational system and external examinations, then it is possible to consider the future of the school in the light of the influence of these two factors being ignored, that is to say that the instrumental features of the school will be de-emphasised, in favour of the expressive aspects. It is interesting to note in this respect, that such arrangements would clearly suit a large number of the staff, whose attitude towards the academic work of the school is ambiguous. It has already been shown that the largest staff choice for the most important innovation (45 %) is in the area of greater equality in social relations between staff and children. It has been shown, also, that this aspect of the school gives most staff their greatest satisfaction. Moreover, when the teachers were given a list of 12 items by means of which the influence of the school would make itself felt and asked to say whether the item was likely to be "Highly Important", "Moderately Important", or "Not Important", the two items which received the highest number of "Highly Important" rulings were :

i) Visible improvements in pupils' social adjustment

ii) Visible improvements in the community's involvement in the school.

Both of these are clearly in the expressive area. Significantly, also, visible improvement in pupils' academic achievement was placed eleventh out of twelve in the "Highly Important" column.

If, in fact, the staff do concentrate their efforts in the expressive area they will not be meeting the expectations of either the pupils or the parents and, regardless of any success they have in the very difficult task of modifying pupils attitudes, the school is likely to face problems from parents and the local council who are likely to be looking for measurable academic success. In this context it is worth noting some of the doubts expressed by pupils who are about to enter the school. Also it is interesting to observe that in the small public debate which has already occurred about the school in the Press, those parents who are giving their support to the innovations do so in terms of the "pay off" in academic achievement which will come in the long run. It should be remembered that in the mid-1960s a London comprehensive school was, in an almost unprecedented move, closed by its local education authority. The ostensible reason for the closure was that the arrangements at the school and the administration of the head had lost the confidence of the parents. At the time the school was noted for far-reaching changes in pupil-teacher relationships, largely inspired by the headmaster, with many staff attempting to develop new, more expressive relationships with the pupils. It has been shown earlier that it is difficult to combine expressive and instrumental roles and it is suggested that it is virtually impossible in the present democratic pluralistic society to ignore completely the expectations and demands of those groups of people who, however indirectly, exercise some power over the school or have some legitimate interest in it. The demise of Risinghill school in London is testimony to those observations. It is doubtful if the message has been completely lost in Leicestershire, and it is unlikely, despite the views of some of the staff, that Countesthorpe College teachers will ignore completely the social facts of the wider society ; as one teacher says, "We see ourselves as educators rather than teachers. But having said that we have to remember that the parents require certain things from us - certificates for jobs, for university entrance. It is our responsibility to do that as well".

If it is argued, then, that the empirical studies of the social sciences suggest that McMullen and the staff are unlikely to realise, completely, the expressive goals they have set up, if, further, it is suggested that the constraints embodied in the value systems of the working class, the demands of the occupational system and the expectations of pupils and parents for the teacher role will modify the activities of the staff, then it is reasonable to discuss the nature of the modification which might occur.

One real possibility, for which evidence is already available, is that the school will polarise. There will be a proportion of the pupils who will accept the explicit and implicit goals and standards of the staff. They will not present severe problems of control or motivation, and in general, will learn and will achieve academic success. The teaching for these students is likely to be oriented towards the examination syllabus, and will probably be a mixture of the conventional and the innovative, as described in the preceding sections. It is likely that the pupils in this group will be predominantly, though not exclusively, from middle class homes.

Another group, however, will continue to present the problems in respect of control and motivation which have already been indicated. Predominantly working class, they will find difficulty in making academic progress, and are likely to be those who will leave at the minimum school leaving age. Already, a more general use of the available sanctions has been applied to these pupils. It is, also, these less successful pupils who might become the main focus of the innovations, as the external constraints operating upon the teachers will be less powerful. Moreover, precisely because the pupils in this category are not successful in academic terms and are likely to contain the pupils from "difficult" backgrounds, they will legitimately be a focus for the expressive orientations of the teachers.

Discussion with pupils suggests the appearance of such polarity even at this early stage, though no attempt to measure it in relation to background variables has been made. Quite simply, some children get on with their individual school work and accept the guidance of the staff. Others, however, lack the skills and motivation necessary ; they do little, and on occasions disrupt everyone. Both categories of children seem to recognise each other.

Now, if this tentative estimate of polarity amongst the pupils has any validity, then it is possible to suggest that it will be reflected in a polarisation amongst the staff. There are slight suggestions, at this early stage, of possible divisions. The graduate teachers on the staff rate individualised learning as the most important innovation, whilst the non-graduates stress the greater equality in social relationships. Similarly, the graduates rate visible improvements in pupils' academic achievements as being a highly important way in which the influence of the school will be felt, whereas the non-graduates and those teachers without special responsibility allowances emphasise changes in the pupils' social attitudes. The comments of the staff reveal signs of polarisation also - "There are some children who choose not to go to science, not to go to music ..... it just won't work this way" (Graduate, male) ; "The best thing here is the freedom of the children to choose a large part of their work" (Non-graduate female) ; "Tendency for too casual a relationship to spill over into teaching time and hamper serious attitude to study" (Graduate, female) ; "The opportunity to be easy-going and natural with children is something I really appreciate" (Non-graduate, female).

If polarisation does develop amongst the staff, with some teachers emphasising the instrumental tasks of the school and others the expressive, then the initial evidence suggests the division might be twofold, by sex, and by graduate/non-graduate status. If these are to be the divisions, then they only reflect structural differences in the teaching profession which have been well documented elsewhere(30). There are important differences in orientation between men and women teachers, and between graduates and non-graduates. It seems a

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30) See, for example E. Hoyle - The Role of the Teacher, Routledge and Kegan Paul, London, 1969.

real possibility that, as with pupils and parents, the teachers are subject to external social facts which will modify the work of the school as it develops. Such modifications and developments have obvious implications for the operation of the staff democracy.

This discussion of the possible future of Countesthorpe College has, then, enlarged upon some of the arguments and types of analysis suggested earlier. The transmission of knowledge takes place in a social context, only a small portion of which can be controlled by the educators. Innovative ideas and proposals, however worthy they might be, must be reviewed in the light of the conditions which enable them to "take" and the conditions which facilitate their diffusion. It is hoped that this case study has served to illuminate some of the problems and to develop some of the important questions. Nevertheless it is limited. Case studies, by their very nature, are always limited because it is virtually impossible to say whether all the characteristics described are just unique features of the case under examination. Ideally, case studies should set up further, more systematic enquiry.

The present study has also been restricted by scarcity of time and resources. As a result, it has been impossible to examine parents and pupils in full detail, particularly, vital background variables like age, sex, social class having been neglected at an empirical level. At the same time, the study of the staff has been of a simple and direct kind, and it is likely that the opportunity to employ more sophisticated techniques would yield more interesting data. Especially it would allow some of the material suggested by the interview data to be more systematically tested. In the present inquiry lack of time meant that the staff interviews and the administration of the questionnaire were conducted concurrently.

In the long run studies of innovations in education must be longitudinal. The chance must be taken to examine a variety of schools in different social contexts over a period of time. In the research, emphasis must be placed upon important questions relating to the recruitment of staff, the distribution of power in the educational system and within particular educational organisations. The conditions under which pupils', parents' and teachers' expectations and attitudes are modified in respect of new practices must be a vital area of enquiry, and the background variables like age, sex, social class, community context, which might relate to acceptance or rejection of innovation, must be closely studied. Finally, the inquiry must be long term in order that the products of the innovations, both the practices and the people, can be examined at the end of the experience to see how they differ from more traditional products. Such an investigation would be difficult to initiate, but it would have the great advantage of unmistakably uniting, in a clear piece of policy research, those who believe in educational innovation and progressivism as a means of bringing change, and those who believe that change will come through the cautious analysis of scientific social enquiry.

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Appendix I

ABSOLUTELY CONFIDENTIAL

This questionnaire has been designed after discussions with members of staff. Its aim is to provide me with useful background information about the teachers at Countesthorpe, and also to help me understand their views on the working of the school.

Most of the questions only require a simple mark (usually ✓), though a few ask for more detailed comment. Please feel that you can write freely, as this document is absolutely confidential. The array of numbers on the right hand side can be safely ignored as they are to facilitate the procedures involved in computation.

I would be grateful if you could complete the questionnaire and return it to me as soon as possible.

Many thanks,

Gerry Bernbaum

☐☐ 1-2

1. What was the year of your birth ? 1 9 ☐☐ 3-4

2. Sex
(Please place tick in the relevant box)

Male ☐ 5/1
Female ☐ 5/2

3. Are you a graduate or non-graduate
(Please place tick in the relevant box)

Graduate ☐ 6/1
Non-Graduate ☐ 6/2

4. Are you in receipt of a Head of Department allowance or responsibility allowance ?

Yes ☐ 7/1
No ☐ 7/2

5. Before teaching at Countesthorpe how many years of full-time teaching experience had you ?

None ☐ 8/1
1-5 yrs ☐ 8/2
6-10 yrs ☐ 8/3
More than 10 yrs ☐ 8/4

6. In which major area of the school curriculum do you mainly work ?

Music ☐ 9/1
I.G. ☐ 9/2
C.W. ☐ 9/3
Science ☐ 9/4
Maths ☐ 9/5
Remedial ☐ 9/6
P.E. ☐ 9/7
2D & 3D ☐ 9/8
Languages ☐ 9/9

7. At what type of school have you previously taught as a full-time teacher ?

Sec Mod	☐	10/0
Primary	☐	10/1
Independent	☐	10/2
Tech. Coll	☐	10/3
Grammar	☐	10/4
11-18 Comp	☐	10/5
11-14 High School	☐	10/6
11-18 Upper School	☐	10/7
Special	☐	10/8
Other	☐	10/9

8. Before coming to Countesthorpe had you personally been responsible for any innovations in the syllabus which you taught ?

Yes	☐	11/1
No	☐	11/2
No previous teaching experience	☐	11/3

If yes, please describe ....
....
....
....
....
....

☐ 12

9. Before coming to Countesthorpe had you personally been responsible for any innovations in methods of teaching ?

Yes	☐	13/1
No	☐	13/2
No previous teaching experience	☐	13/3

If yes, please describe ....
....
....
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☐ 14

10. In comparison with your knowlege of other schools and other teachers, please describe what you regard as the main innovative features of your own teaching at Countesthorpe, in terms of objectives content, methods.

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11. As far as your own teaching is concerned please indicate any of the listed groups or social facts which you feel constrain you in the innovations you might wish to adopt.

Previous ed^{n}. exp. of children	☐	16/0
Parents	☐	16/1
Colleagues	☐	16/2
LEA Officials	☐	16/3
Local community opinion	☐	16/4
Exam syllabus	☐	16/5
Lack of adequate teaching material	☐	16/6
Social values of children	☐	16/7
Other (write in)	☐	16/8

12. If you have any comments to make on Q.11, please use the space below

....

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....

☐ 17

13. As far as you are personally concerned which of the innovations listed do you regard as the most important -

Tick one only

Individualised learning	☐	18/1
Staff Democracy	☐	18/2
Inter-disciplinary curriculum	☐	18/3
Greater equality in social relations between staff and children	☐	18/4
Other (write in)	☐	18/5

14. If you have any comments on Q.13, please use the space below

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☐ 19

15. Please indicate your degree of satisfaction with the operation of staff democracy

Very satisfied	☐	20/1
Generally satisfied	☐	20/2
Not satisfied	☐	20/3

16. If you have any comments on the operation of staff democracy, please use the space below

....

....

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....

....

☐ 21

17. Please indicate your degree of satisfaction with the operation of individualised learning in the school

Very satisfied	☐	22/1
Generally satisfied	☐	22/2
Not satisfied	☐	22/3

If you have any comments on the operation of individualised learning, please use the space below

....

....

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....

....

☐ 23

18. Please indicate your degree of satisfaction with the inter-disciplinary schemes in the school

Very satisfied	☐	24/1
Generally satisfied	☐	24/2
Not satisfied	☐	24/3

19. If you have any comments on the operation of inter-disciplinary schemes in the school, please use the space below

....

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....

....

....

☐ 25

20. Please indicate your degree of satisfaction with the nature of the relationships between children and staff in the school

Very satisfied ☐ 26/1
Generally satisfied ☐ 26/2
Not satisfied ☐ 26/3

21. If you have any comments on the nature of relationships between children and staff, please use the space below

....
....
....
....
....
....

☐ 27

22. Please indicate your degree of satisfaction with the sanctions available to deal with children at the school

Very satisfied ☐ 28/1
Generally satisfied ☐ 28/2
Not satisfied ☐ 28/3

23. If you have any comments to make on the sanctions available in the school, please use the space below

....
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....

☐ 29

24. Many people see Countesthorpe as the "school of the future" and as being influential in bringing about change in educational organisations.

Do you agree with this view ?

Yes ☐ 30/1
No ☐ 30/2

24. (contd) ...

If 'Yes', by what means do you see the influence of the school making itself felt. Please enter a tick for every item

	Item	Highly Important	Moderately Important	Not Important
1.	Publicity in educational press	☐ 31/1	☐ 31/2	☐ 31/3
2.	Effects of visits by other LEA officials	☐ 32/1	☐ 32/2	☐ 32/3
3.	Movement of staff to other schools	☐ 33/1	☐ 33/2	☐ 33/3
4.	Visits of students from teacher-training establishments	☐ 34/1	☐ 34/2	☐ 34/3
5.	Visible improvements in pupils' social adjustments	☐ 35/1	☐ 35/2	☐ 35/3
6.	Movement of staff into teacher-training	☐ 36/1	☐ 36/2	☐ 36/3
7.	Visible improvements in pupils' academic achievement	☐ 37/1	☐ 37/2	☐ 37/3
8.	Visible improvements in the community's involvement in the school	☐ 38/1	☐ 38/2	☐ 38/3
9.	Outside lectures by leading members of staff	☐ 39/1	☐ 39/2	☐ 39/3
10.	Staff influence in curriculum study groups	☐ 40/1	☐ 40/2	☐ 40/3
11.	Publication of materials prepared at school	☐ 41/1	☐ 41/2	☐ 41/3
12.	Successful school pupils entering the teaching professions	☐ 42/1	☐ 42/2	☐ 42/3

24. (contd) ...

Other items that you regard as "highly" or "moderately" important (write in)

	Highly Important	Moderately Important
....	☐ 43/1	☐ 43/2
....	☐ 44/1	☐ 44/2
....	☐ 45/1	☐ 45/2

Once again, thank you very much for your co-operation. Please return to me as soon as possible. GB

February 1971

Part Two

THE EXPERIMENTAL GYMNASIUM, OSLO, NORWAY

by

Trond Eiliu Hauge

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Chapter I

HISTORICAL AND ADMINISTRATIVE CONTEXT

BACKGROUND

In its main features the educational system in Norway is built up in three major stages.

1. On the lowest level is the elementary school, which today is well on its way to developing completely into a nine-year, compulsory comprehensive school (and will hereafter be referred to as the comprehensive school). The nine-year comprehensive school has been experimented with since 1954, which was the year permission was given to engage in experimentation in the compulsory school system (refer to Act of 1954). Following a comparatively long period of experimentation it was decided in 1969 that the nine-year comprehensive school should be introduced as the normal system all over the country. Organizationally this type of school is divided into two main stages; one level for the first six years and one for the last three years. These stages are described as the primary school and the comprehensive youth school.

2. "The school system for further education" is in principle the name given to all of those schools based on a completed comprehensive school education. These schools for further education are many-faceted and not very uniform. In general they can be divided into two main groups, however : schools that offer training or preparation for an occupation and schools that provide the basis for further education at the highest level within the school system. The dissimilar types of schools within these groups can include an education that lasts from six months to four years.

3. At the highest level of the organized system of instruction there are universities and institutions of higher learning as well as a number of other schools that offer education on a post-gymnasium level. The collective description often used about these schools is "post-gymnasium educational opportunity". This name has developed from the fact that these educational institutions are mostly based on the gymnasium, one of the types of school within the school system for further education (refer to paragraph 2).

Figure 1 shows schematically the school system outlined above.

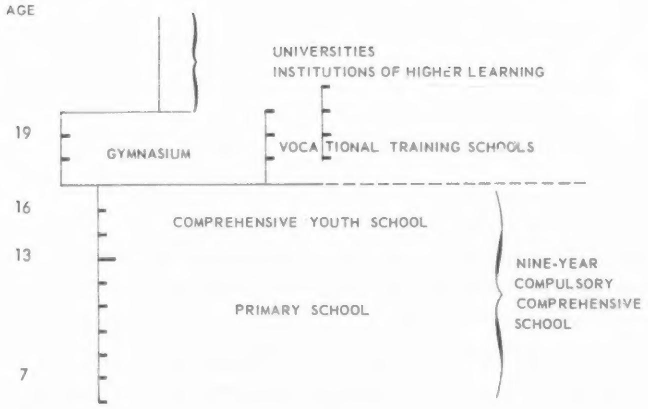
AGE
UNIVERSITIES
INSTITUTIONS OF HIGHER LEARNING
19
GYMNASIUM
VOCATIONAL TRAINING SCHOOLS
16
COMPREHENSIVE YOUTH SCHOOL
13
NINE-YEAR
COMPULSORY
COMPREHENSIVE
SCHOOL
PRIMARY SCHOOL
7

Figure 1. Outline of the Norwegian school system.

The gymnasium is a three-year school and is intended to cover the age-group 16-18 years. Among the schools for further education the gymnasium stands out as a school with strong traditions in our country. Historically speaking this school has its background in the old "Latin schools" and "scholars' schools". Because of this the gymnasium has established a very special position within our school system. It has been, and to a very great extent still is true that the path to higher studies leads through this type of school. The fact that the gymnasium is to provide the basis for further studies is also reflected today in the objectives set up for the gymnasium. In the Act of 1964 on "Lower secondary schools and upper secondary schools" (hereafter to be called by the Norwegian names of "realskoler" and "gymnasium", respectively) it is stated :

"The Gymnasium is to provide the basis for study at the universities and institutions for higher learning and for other forms of further education".

For young people who have wanted to pursue a higher education the road for a long time has been through the gymnasium. Only in recent years can it be said that this system has become somewhat more flexible, but the gymnasium education is still considered to be the most natural method of being able to pursue higher education.

Besides being a preparatory institution for higher studies the gymnasium contains a strong element of being a higher, general education school. This was emphasized, for example, in 1935, when Norway was given the Act on "Upper Schools for General Education". The general education aspect is also emphasized in the Act of 1964 on "Realskoler and the Gymnasium", in which par. 2 states . "The gymnasium is to contribute to the pupils' Christian, ethical, social, aesthetic and physical development, offer the pupils knowledge and develop their working ability and talents".

With this the gymnasium appears to have a double task. One of these tasks is offering a general education and the other is to provide a basis for further studies. Even though the wording or formulation has changed in the various Acts it will be seen that this objective has been the same since the last century. But in practice it appears that the activity of the gymnasium has primarily been determined by the pupils' further studies at institutions of higher learning and the universities.

Traditionally the gymnasium has been a school for a smaller group among the population. As late as 1930 only 3 % of the 16-year-olds applied for admission to the gymnasium. Since the Second World War, however, there has been a steady increase in applications to the gymnasium. Since 1960 there has been what could almost be described as an "educational explosion", which has resulted in the number of pupils being doubled in the course of just a few years. On a national basis more than 20% of the 16-17 year olds attended the gymnasium in 1966. But it must be noted that the applications vary according to how well developed the gymnasium offer is in the different sections of the country. In certain urban areas the applications amount to almost 40 % of one year's comprehensive school graduates.

Where the groups of subjects and content of the gymnasium have been concerned it has long been a problem trying to fulfil the desire to make room for new subjects which have emerged because of the increasing differentiation in society and in various sciences. At the same time there is the wish to retain the general educational aspect, with emphasis on development of character and development of the complete personality. The gymnasium has also had to yield to the demand for an earlier and sharper differentiation, however. This led to an increased division into courses and variations of courses beginning with the first year of gymnasium. This line of development is clearly noted in the Act "Upper General Schools" of 1935. In reality it has proved that it is the cities that have been able to offer the most differentiated gymnasium courses. Regarding the country as a whole, the situation today is that most gymnasiums cannot offer anything but the science and English courses. Apart from the Economic Gymnasium there were only 8 % of the gymnasium graduates who completed other courses and variations in 1965.

In the recommendations made by a gymnasium commission appointed by Royal Decree, "Recommendations for Reforms in the Gymnasium" of 1967 (1, p. 7), it is claimed that the system on which the gymnasium of today is based, with its division into fixed courses, has been too inflexible to allow the individual school any real opportunity for variations in the groups of subjects. In the recommendations it is further stated that the gymnasium has not managed to meet the great increase in the number of pupils with an organizational reform serving the best interests of the teachers and the pupils.

What there has been of renewal in the gymnasium since 1935 has mainly taken place in the internal subject and educational sectors in the schools. This development work has been done on the basis of par. 8, "the experimental paragraph", in the Act of 1964 on "Realskoler and the Gymnasium", and par. 8 in the earlier Act on "Upper General Schools" from 1935. No extensive structural exprimentation in the gymnasium was begun prior to 1969, and then it was done on the basis of the above-mentioned report on "Recommendations for Reforms in the Gymnasium".

It should be mentioned in this context that by the end of the 'Sixties attention had also been drawn to the possibilities of an integration of the gymnasium and more vocation-oriented types of schools. "The School Committee of 1965" has made several recommendations for integration experiments of this kind. These plans have already been concretized by experimental activities in various sections of the country.

The school system in Norway is built up administratively in such a way that, compared with other countries, it is relatively centrally directed. This is true of the comprehensive school as well as for the schools for further education. In extensive and detailed laws and regulations drawn up for the various types of school the goals and content for the schools are prescribed as well as what instructions and rules are valid for the employees, and what their duties are. In many ways this seems to be necessary for a country like Norway which has so many differing geographic and economic conditions in the different sections of the country. In this way assurance is given that the educational opportunities will be reasonably similar. This must also be considered as an official policy, in which there has been the desire to even out the differences among the sections of the country where education is concerned.

The structure of the school system offers actual possibilities for the Central Government to engage in such a policy. The Royal Ministry for Church and Education, which is subordinate to the national parliament (the Storting), is the highest authority on school matters in this country. The responsible leader of the Ministry is one of the Cabinet Members of the Government in office at any given time. The laws and regulations are also determined by this body. The Ministry, in turn, has various subordinate councils for the different types of school which act as a liaison between the Ministry and the schools. To a great extent these councils take care of all practical current affairs, such as the central examinations plan, experimental activities, etc..., and are the bodies relieving the Ministry of many duties. They also advise the Ministry on various matters.

Figure 2 shows a part of the structure of the school system as it appears for the municipality of Oslo.

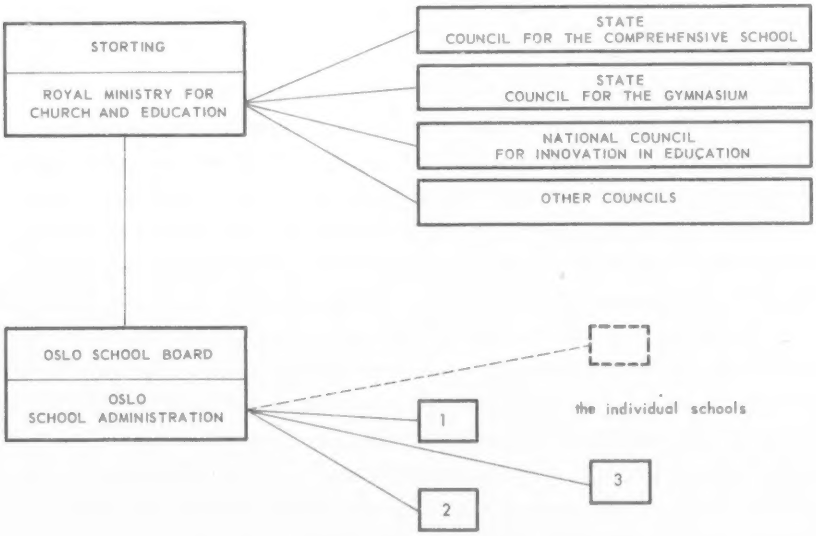
STORTING
ROYAL MINISTRY FOR CHURCH AND EDUCATION
STATE COUNCIL FOR THE COMPREHENSIVE SCHOOL
STATE COUNCIL FOR THE GYMNASIUM
NATIONAL COUNCIL FOR INNOVATION IN EDUCATION
OTHER COUNCILS
OSLO SCHOOL BOARD
OSLO SCHOOL ADMINISTRATION
the individual schools
1
2
3

Figure 2. The administrative structure of the school system (Oslo).

To a great extent the individual community is limited by the central departmental decisions. However there is a certain amount of community self-government. It would take too long to discuss where the borderline runs in this connection, however. In conjunction with the description of the Experimental Gymnasium in Oslo some insight will be given into what this municipal self-government meant for this school.

One result of strong central direction of a school system is that the individual school, in the opinion of many people, is allowed comparatively little freedom of action. The regulations prescribe to a large extent just what should be done in the schools. However it must be emphasized that this practice is carried out in agreement with and the approval of the representatives of the people in the Storting.

The Experiment in Education Act " of 1954 and the later establishment of the National Council for Innovation in Education have made it possible for the individual school to engage in experimental activities and development work in many areas within the school. In conjunction with this it was natural to begin with the compulsory education, refer to the development of the nine-year compulsory comprehensive school. It now appears that reform activity is starting in the schools for further education. It may also be noted that this activity began at approximately the same time as the Experimental Gymnasium was established.

THE ESTABLISHMENT OF THE EXPERIMENTAL GYMNASIUM

The year 1966 was a historic year for the Experimental Gymnasium in Oslo. The initial ideas for the actual forming of a completely new upper secondary school in Norway were realized in that year. A new, a different, a non-traditional school was a dream that became a reality. This dream was the dream of three young gymnasium students in Oslo., three friends who were dissatisfied with,and unhappy in, the traditional gymnasium.

In this case, however, dissatisfaction led to concrete actions. The ideas of The New School were presented in a mimeographed appeal to the pupils and teachers in the upper schools in Oslo. The serious intentions of this letter were further emphasized by the fact that the Norwegian Ministry for Church and Education, the daily Press and a number of prominent individuals also received copies. The letter was signed by the three gymnasium students and ended with the plea that this matter be taken up for discussion.

And the matter was taken up for discussion. The whole affair began in

March 1966, the month in which the appeal had been sent out, and gradually led to a lively, emotional and fierce debate. This will perhaps be better understood after reading what the appeal said :

> "TO PUPILS AND TEACHERS AT THE UPPER SCHOOLS IN OSLO :
>
> Many pupils feel that they are being cowed by authorities into dissatisfaction. They feel that old, worn-out people are denying them possibilities for development, friendship, freedom, denying them a sexual life, denying them their youth.
>
> The previous generation has, in its time, been in the same situation as that of today's youth, and this youth of today will, in a few years, become "the older generation".
>
> The gymnasium holds a key position in this vicious circle. With its dictatorial structure, its system of grades with teachers as the only judges, with its compulsory attendance, with its dreary methods of teaching, the gymnasium is a school in which efforts are made to force the pupils to adjust to an outmoded system of authority, and where the development of the pupils' personalities and independence is given secondary priority. (Refer to "The Gymnasium in the Limelight I" postscript).
>
> The results of the authoritarian system on a school is that the relationship between pupils and teachers is impersonal and often almost hateful, that there are few real friendly relationships between the parties, that the pupils band in solidarity against the teachers, and vice versa. The dissatisfaction and lack of freedom in this relationship has an inhibiting effect on the productive efforts of both parties.
>
> Teachers are restricted by their elevated position in the classroom. Consideration for their prestige makes it difficult to show tolerance towards the pupils' opinions and proposals. As soon as the pupils are accepted as people, the authoritarian position of the teacher is threatened.
>
> Work is being done on several facets. The National Council for Innovation In Education (NCIE) is working with experiments in the schools. The Association of Secondary School Teachers in Norway has appointed a gymnasium committee, the Association of Norwegian High School Students (NGS) has held annual conferences, articles are written in newspapers and weekly magazines. These are positive actions and in accordance with the democratic spirit. But gymnasium pupils and teachers have not been given any real chance - nor have they given themselves any. The objective of this

paper is to offer them the opportunity to participate in building up a democratic gymnasium.

Concretely this means that we will work to establish a new upper secondary school in Oslo as soon as possible. At this school teachers and students will have the same rights, together they will determine the necessary rules and act as judges when these rules are broken ; no grades will be given nor will there be homework in the traditional meaning of the word ; insofar as possible attendance will be voluntary, and no excuses will be necessary for absences.

The curriculum will be planned in cooperation between teachers and students ; here freedom is limited by whether or not the pupil wants to take his examen artium(*), and what non-traditional subjects the teachers feel they are competent to teach. Study techniques and the teaching plan are also to be planned in cooperation. At a school like this we hope that there will be more room for individuality, development, tolerance, more room for constructive activity.

Our first concrete task, after those pupils and teachers who are interested have gathered together, must be to select study-groups for reporting on :

the objectives and curriculum for the new gymnasium,
the school hours and plan for the school day,
teaching methods and materials for each subject,
the question of homework,
activities outside of the curriculum subjects,
the implementing of democracy in practice,
the practical organizational work.

This circular is aimed at creating radical changes in a system limited by tradition. It is drawn up by unknown people. We realize that in the eyes of many these are two negative factors.

Besides this, the format of the circular has prevented a thorough discussion of each point.

But we know that in the schools there are teachers who are working to improve their relationship with the pupils through exactly these trends toward equal rights. We also know positively that many young people are thinking the same thoughts as those of the undersigned. Besides the traditional aim of wanting to start a debate it is our main objective to gather these people together to take positive action.

---

*) The national examinations given upon completion of the three-year gymnasium

This circular will be distributed at as many gymnasiums and realskoler in the Oslo area as possible, it will be sent to the school newspapers and the Oslo papers, to the Ministry for Church and Education and those committees working on the school system, as well as a number of individuals and groups.

If you are interested in this matter, send in the coupon below to

Jon Lund Hansen
Erling Skjalgssonsgt. 26, Oslo-2

- -

I am interested in taking an active part in starting a new upper secondary school in Oslo.

NAME : TEL. :
ADDRESS : TEACHER/PUPIL
SCHOOL :
PRESENT CLASS LEVEL :

Jon Lund Hansen Ingrid Kviberg Knut Boe Kielland

- -

The contents of the circular show with all possible clarity a protest and dissatisfaction with the traditional gymnasium. There is rebellion against a system which the pupils regard as outmoded, a system that is felt to be authoritarian and confining. In strong language it is made apparent that there is a crisis of confidence between teachers and students, and that their school days have become an existence with little meaning in it for the pupils.

In this protest it appears very clearly that the undersigned want to establish a school where the teachers and pupils have equal rights, where the students can have a part in determining their own learning situation and where there is more room for the development of the personality and independence of the individual. It is a new upper secondary school, based on fundamental democratic principles, that is the aim of the three gymnasium students.

There was no lack of reactions to the appeal, but it was not until a later date, when the more concrete plans for the establishment of an experimental gymnasium has been presentend, that the really violent reactions for and against such a school were heard.

About a hundred people reacted immediately to the appeal, either in the form of practical or moral support. With this it appeared that the whole affair was under way.

A more detailed report on the prehistory of the Experimental Gymnasium, up to the time that it actually started in the fall of 1967, may be found in "The Experimental Gymnasium in Practice" (6) and "Experiences from the Experimental Gymnasium in Oslo" (5). In this context an effort will be made only to report on aspects of the prehistory that point toward central characteristic features of the Experimental Gymnasium, features that show which traditions the school wanted to break away from and features giving the background for an understanding of the school's ideological basis and innovative practice.

From this first group of interested people a smaller group soon crystallized who, during the period that followed, began formulating the concrete plans for an experimental gymnasium.

Study circles were formed and a work committee appointed which was to be responsible for the planning and preparations for the project. In the various work groups there were gymnasium students as well as people experienced in school work.

What brought these people together ? What were their motives ? What sort of school did they want to establish ? Questions like these cannot be answered on the spur of the moment because the picture seems to have been quite confused during the first phase of the plan formulations.

In general it may be said that dissatisfaction with the existing conditions in the gymnasium was the unifying factor for the teachers and the students in this connection. It was said that the gymnasium was in a state of stagnation. This seems to have been an accusation from different sides during the last couple of decades where the gymnasium was concerned (refer to chap. I. 1). No initiative was taken for a reformation of the existing gymnasium until 1967-1968. Where the internal pedagogical life of the school is concerned it seemed clear to those who took the initiative and those who were later actively interested in the Experimental Gymnasium that here too there has been stagnation. This is obviously the opinion of the pupils (refer to the appeal), but it was also expressed by older interested school people. This was most clearly expressed by gymnasium teacher Carl Hambro, one of the most active supporters during this first period. In 1966 he wrote a book that discussed the situation of the pupils in the gymnasium. ("Are Gymnasium Students People ?" (4)). In this book he is in favour of supporting the establishment of a free school, the much-discussed experimental gymnasium. Some justification for this can be found in the foreword to the book, in which it is stated :

> "The starting point for this book is a deep distrust of the upper school as it exists today. I feel that I am giving my students stones for bread. One can strive to find free forms in which to work. But the System is crushingly strong. The System means the internal structure in a school that holds the pupil tightly in a double grip of authoritarian discipline. The System also means the school's external structure, which is just as authoritarian and hierarchical, so that the teachers are forced into a conformative way of thinking ......" (4, p. 7).

It is not only among this group of people that there is doubt concerning the existing gymnasium. As early as 1962 a report drawn up by the Association of Secondary School Teachers in Norway was presented on conditions in the gymnasium : "The Gymnasium in the Limelight, I" (9). The Association of Secondary School Teachers in Norway is the professional organization to which most of the teachers in the gymnasium belong.

In this report (9, p. 100) it is said that the present gymnasium has, without any doubt failed on certain points. There is criticism of the fact that it does not offer sufficient opportunities for practice in independent work, and that not enough time is allowed for a reasonable degree of aesthetic education. The Association also points out that there is not a very good balance among the present gymnasium courses. The organization also believes that too few hours are devoted to several of the traditional subjects to form a feasible basis for further studies.

The dissatisfaction among the founders of the Experimental Gymnasium seems, however, to have been more because of the interhuman relationships in the traditional gymnasium than because of the gymnasium's subject content. Where the pupils are concerned this seemed to be a predominant motive for the establishment of a new schools. They want a school where they can be treated as people with equal status, a school that respects the individual's value as a human being. The school's first leader also said that there must be a renewal of social life in the school, and that democracy must be promoted. But at the same time it is claimed that the gymnasium must be renewed educationally and in subject content. This line of a renewal of the school educationally and in its subjects was, to some extent, followed by those teachers who wanted the school established. The road to renewal should go through subject experimentation and renewal, several of them claimed. One of those who took the initiative for the appeal for the school says that this thereby became a source of conflict. For this person it was the interhuman-relations aspect, respect for the integrity of the individual which it was most important to correct.

During the founding phase of the Experimental Gymnasium there appears thus to have been a definite disagreement among the active persons as to objectives, structure and content of the new gymnasium. Finally a conflict on these points appears to have been unavoidable. This is most clearly revealed in the two different proposals for laws for the new school. In these proposals the schism appears between those who believed that they could do away with the intolerable conditions in the school using a more humanitarian educational system and those who maintained that there must be an actual shifting in the position of authority in the school (5, p. II-11).

The disagreement thus seems to have been a matter of to what extent the pupils should have actual influence and the deciding work on decisions to be made within the school. Here the views on the so-called "General Session", which all of the school's pupils, teachers and other employees had the right to attend and cast their votes, played a decisive part. To what degree the everyman's meeting was to be the school's highest and determinant body became one of the central points of the conflict. The victorious group in this battle won on the thesis that this body should be the school's highest authority. The result of this decision was that several active and prominent participants in "the movement" found that they could no longer take part.

This decision was a sign to begin sending out what proved to be a number of applications for permission to start the new upper school and for economic support for the school. Beginning with the winning proposal for laws,the more detailed plans for the school's structure and functions were drawn up. During the period from December 1966 until August 1967 there was lively activity on the written level between a working committee for the new school and the Royal Norwegian Ministry for Church and Education, as well as, in the final phase, the city of Oslo's School Administration, and the city of Oslo and the Oslo School Board.

During this period of applications the working committee found itself in a difficult situation. They were in the position of being the representatives of a school where those who were to attend the school were themselves to determine its form and content to as great an extent as possible. This was a result of those ideas which had been behind the thought of an experimental gymnasium. Nor did the committee have any authority to fix what these future pupils were to do. The committee did have a certain foundation on which to build. The previous work that had been done by the various reporting groups/study circles (refer to proposals for work sectors in the appeal, p. 8), and the conclusions that had been reached in joint discussions formed a basis for the formulation of certain plans. But the authorities, and mainly those at the Ministry for Church and Education with its various councils, demanded detailed and concrete plans. This was particularly true for plans in the individual subjects. The result of this conflict was that the working committee had to formulate more concrete plans. (Refer to 5, pp. 11-13). It will take too long at this point to go more into detail on the correspondence that took place between the Ministry and the working committee. Some insight into this can be gained by reading the Recommendation to the Storting, no. 226 - 1967-1968 (8).

At the beginning the attitude of the Ministry towards the establishment of the school was one of great scepticism. The working committee had to accept several rejections. Finally the City Council of Oslo was also brought into the matter and was asked for financial support for the school for the school-year 1967-68. By this time the Ministry had already announced that it did not have any funds for the planned gymnasium. However the Oslo City Council gave positive promises of economic support for the Experimental Gymnasium on the condition that the school's plans were approved by the Ministry for Church and Education. Immediately following this resolution the Ministry gave permission for the school to get under way, although as an ordinary private school, without the right to give examinations. With this the school was a fact - not as a public school, but as a private school with public financial support. This permission to start the school was given with certain reservations, however. No experimentation with subjects was to be allowed for the coming school year 1967/68. Nor was the school given examination rights. This meant that pupils who started at the Experimental Gymnasium would have to take examinations in all subjects as private students. One result of this was that several of those students who had applied for admission to the school withdrew their applications.

On 30 August 1967 the Experimental Gymnasium was officially opened. The school was given classrooms at Tøyen Primary School in Oslo, in rooms that in many ways were not very well adapted for the objectives of the gymnasium. But the courage to forge ahead and the willingness to exert themselves were characteristics very much present in those who had taken the initiative to start this school. A gymnasium founded on fundamental democratic principles was now a fact, according to those who had taken the initiative and their supporters.

NATIONAL MUNICIPAL ADMINISTRATIVE RELATIONSHIP

The Experimental Gymnasium in Oslo has remained a private school with complete public financial support from the city of Oslo. But the first grants to the school from Oslo were given on the condition that the Central Government would also pay a share comparable to the subsidy, according to the general rules for the gymnasium (35 % of the normal rate per pupil). The Ministry could not fulfil this condition for the year 1967, and has not done so in the following years, either. The result of this has been that the city of Oslo has covered all the expenses for the school from the very beginning and up to the present, apart from a small amount given by the State to enable the teachers to be members of the State Pension System.

The reason for the Ministry's attitude is to a great extent founded on its view of the school as a private school and the requirements which a school like this must satisfy. The Ministry relied a great deal on the evaluation of the State Council on Secondary Education in this matter. At first this council could not recommend that the school be allowed to start operations on the basis of the plans that were available. Finally, after several plan adjustments by the working committee of the Experimental Gymnasium, the council felt able to permit the beginning of the school's operations. During this whole period the evaluations were made on the assumption that the school would be made a private school. The subject instruction also had to follow the current plans for instruction and aim at the pupils' taking the examen artium as private students, according to the usual arrangement. In reality these conditions were an obstacle to the realization of the ideas of the Experimental Gymnasium. The school wanted to engage in subject experimentation. This was a natural result of the ideas presented on school democracy. The Experimental Gymnasium also had to shelve the idea of making an agreement with the University of Oslo which would free the school from some of the limitations which examen artium places on the instruction.

From the conditions set for the establishment of the school we can see that the Ministry has the final word. The plans for the school first had to be approved by the Ministry. In turn the city of Oslo was dependent on this approval before the financial support could become a reality. This is also general practice in the public school system.

What role has the National Council for Innovation in Education (NCIE) played in this matter ? The plans for the Experimental Gymnasium were also presented to this central council. This body made statements on the plans for the Experimental Gymnasium to the effect that the school could be a valuable supplement to our ordinary gymnasium. NCIE also recommended that the school begin as a course for private students and that at the beginning it could concentrate on experiments with new forms for cooperative work and new educational methods. The deeper changes could then be formulated gradually as the school became established as an institution (8, p. 462).

The statements from the State Council on Secondary Education as well as NCIE were considered to be advisory statements for the decisions later made by the Ministry. To the school, however, NCIE's recommendations appeared to be more positive than those from the State Council, and were considered to be moral support for the continued work.

Administratively the school has been given extensive self-government. The subsidies from Oslo have been given in the form of a framework grant, which means that the school itself controls and allocates a fixed sum of money. The first year of the school's existence this sum amounted to kr. 760,000. - (Norwegian kroner).

The grants each year are to cover the wages of the teachers, the rental of classrooms, instruction materials, etc. In relation to the other municipal gymnasiums in Oslo the Experimental Gymnasium is in a very special position on this point. The funds for ordinary gymnasiums are given through specified accounts, which limit the schools to using the money according to definite rules. Money which is granted for the wages of office personnel, for example, can only be used for this pupose. The Experimental Gymnasium, on the other hand, has free rein in the allocation of the money to the school's various operational sectors.

In employing teachers at the Experimental Gymnasium the school itself recommends those teachers it wishes to hire. These recommendations must, however, go to the Ministry for approval, but the Ministry cannot hire teachers without the school's permission. On this point the Experimental Gymnasium differs from other gymnasiums.

As for subject plans and experiments in the different subjects, these are subject to the approval of the Ministry through the State Council on Secondary Education for the Experimental Gymnasium also. The freedom hoped for by the school on this point was not granted.

Since the city of Oslo pays the expenses of the school it is only natural that the Oslo School Administration's Department for School Research and Experimentation has been given the task of following up and evaluating the gymnasium. In this case the National Council for Innovation in Education is not responsible for a follow-up like this, but is following developments at the gymnasium through the evaluations made by the Oslo School Administration, among other sources. The Department for School Research and Experimentation has published a report on the gymnasium from its first school year 1967/1968. (12).

THE EXPERIMENTAL GYMNASIUM AND PUBLIC DEBATE

The establishment of the Experimental Gymnasium in Oslo led to debate not only in the ranks of the teachers but on the political level also. The school's programme consisted of breaking away from an outmoded and authoritarian school system. It is not at all surprising that such a programme roused reactions.

It has previously been pointed out that during the period 1967-1968 concrete plans for the establishment of an experimental gymnasium had been made under Government direction, initiated by national bodies. The National Council for Innovation in Education and the State Council on Secondary Education were of the opinion that experiments in the gymnasium would now have to be intensified. The "private" plans for establishment of the Experimental Gymnasium appear to have accentuated the need for reforms in this type of school. During the planning phase of this new upper school in Oslo it may be noted that the State Council on Secondary Education partially justified its rejection of the plans by referring to the Government activities.

In an answer from the Ministry to an application from the working committee for the Experimental Gymnasium (8, p. 462) the State Council on Secondary Education advises :

> "The recommendation from the official gymnasium committee (9.) which has now been presented, presupposes that a number of experiments will be conducted in order to find the best possible gymnasium programme. It is the opinion of the State Council on Secondary Education that these experiments must first be conducted at ordinary gymnasiums, where there are staffs of well-qualified and experienced teachers and where the necessary teaching aids are already available or can easily be obtained".

From this statement it appears that experimental activity is desirable in the gymnasium, but it should preferably be conducted at the already existing gymnasium. To those who took the initiative for the new gymnasium this appeared to be an unacceptable arrangement. It was this system itself, the authoritarian features of which they could not accept. The new school was to be built up from within - by the members themselves - in cooperation among the teachers and the pupils. A natural result of this idea was that the school wished to be as free as possible of external requirements. An adaptation of the ideas from the ordinary gymnasium was thus not possible.

The attitude of the State Council on Secondary Education in this matter also reflects the attitude of the authorites on private versus public schools. Government support to a school based on ideas that broke radically with the traditional ideas of how and what a gymnasium should be was not immediately acceptable. The solid position of the gymnasium in the school system and in people's minds may also have contributed to the scepticism that was expressed to these new ideas. The fact that there is very little experience from free, experimenting schools in this country may also have contributed to this attitude of scepticism.

And the people behind the Experimental Gymnasium were very strongly inspired by the idea of a free school. It has been stated by the administration of the school that both the Steiner School here in Norway and the Bernadotte School in Denmark have been sources of inspiration for their ideas about the gymnasium. A. S. Neill's experiences from Summerhill - the school in England - also seem to have been influential in this connection.

Representatives from the Association of Secondary School Teachers in Norway expressed their attitudes to the planned gymnasium at an early stage and these, in their main features, were in complete agreement with the statements made by the State Council on Secondary Education. The teachers' association may possibly, in this matter, have seen an opportunity to realize its ideas for an experimental gymnasium. The ideas and plans for this had already been presented in a report from 1962 (9.) In September 1966 the chairman of the Association of Secondary School Teachers in Norway stated that the association had for years been fighting to start an experimental gymnasium. Now they would finally be able to push matters a little bit (6., p. 139).

The further development of the plans for the Experimental Gymnasium was not in agreement with the desires for a public experimental gymnasium. The internal disagreement among those actively interested in the school also led to a clarification of how the school was to be. The shifting of authority in the school's internal deciding bodies resulted in a school which could not be accepted by several of the actively interested school people (refer to chap. 1.2). In this clarification it also appeared obvious that the Association of Secondary School Teachers in Norway would not be able to obtain the experimental gymnasium which it had hoped and wished for, either, in this experimental gymnasium that was now being planned.

The Experimental Gymnasium was good newspaper copy. Particularly during the first year of the school's existence the reactions were many and varied. At an early date the secondary school teachers' association expressed its scepticism towards the school by saying that it believed that it would be an elite gymnasium, a gymnasium for elite pupils, and thus it would be difficult to transfer their experiences to the ordinary school. It was also said that there would mainly be pupils who were in opposition, long-haired students who were tired of school who would attend the new school (6., p. 139). Several other reactions were of this same type.

Attitudes toward the establishment of the Experimental Gymnasium gradually began to follow the political divisionary lines. The non-Socialist parties in their way were more sceptical and rejecting of the school than the Socialistic parties. These differences of opinion also appeared later in the debates on funds for the school in the Oslo City Council and the Oslo School Board.

In these bodies the grants were given to the school because of the majority vote of the Socialist parties against the votes of the non-Socialist parties.

To a great extent the political disagreement on the school was on the relationship between private and public schools. The Labour Party believes that private schools can be given funds when they fill a need in the school sector, and that they thus must be evaluated in each individual case. The non-Socialist parties believe that private schools should be given a legally determined position in the school system, where the rules for subsidies would be very clearly defined. In a editorial in Arbeiderbladet which is the organ of the Labour Party in Oslo, the Experimental Gymnasium was spoken of as a pedagogical experiment - and educational experimental schools were held to have a quite different position than do private schools. The Labour Party would prefer that the Experimental Gymnasium be started as a municipal school. Arbeiderbladet concluded its discussion of the matter by saying that the new school deserved the municipal and Central Government support that was necessary (6, p. 142).

Aftenposten, which is a politically conservative newspaper, claimed in its editorial column that the Experimental Gymnasium carried the signs of radicalism and revolution. That which is radical and revolutionary always has a certain amount of appeal. The newspaper expressed its anxiety at establishing a school on a wave of "feeling" (6, p. 143).

Thus the opinions on the new school were very much divided. The champions of the Experimental Gymnasium felt, however, that in this confusion of opinions there were many people who gave a positive evaluation to the school. This was considered as support for the establishment of the school. The attitude held by the school's advocates during this time can perhaps best be described by a statement made in a speech at the opening of the school :

> "We have a feeling that the Experimental Gymnasium has almost been loved into existence. Of course, not everyone loves us to an equal degree, that would not be natural. But we hope and believe that, as time goes by, everyone will be glad that we exist." (6, p. 15).

The Experimental Gymnasium was not allowed many months in which to work in peace and quiet. Actually the members of the school probably did not want peace where their school was concerned. This was in the revolutionary aims of the school. But a couple of reports on the school which were made public in November-December 1967 caused so many reactions from the press and the Storting representatives, among others, that the very existence of the school was threatened.

Representatives of the State Council on Secondary Education presented a report intended to give a description of the school and its work. The report contained a number of critical remarks of the administration of the Experimental Gymnasium and the instructional content of the subjects. At the same time there were reports of narcotics and the use of hashish among students at the school, made in the form of police reports.

Collectively these reports created a lively newspaper debate and great political activity in the Storting. The discussion of the matter in the Storting led to the Minister for the Ministry of Church and Education, Kjell Bondevik, demanding a vote of confidence. The storm raised in the Storting and outside concerning the Experimental Gymnasium eventually quieted down, however.

But it was unavoidable that the Experimental Gymnasium began to feel itself threatened by this situation that had arisen. The school now entered a period of serious crisis. Fear arose that the whole school experiment was a failure. This fear on the part of its members is presented in Lars Hem's thesis "Experiences from the Experimental Gymnasium" (5,pp. III-5), as fear that they would not be able to make a school such as they had wanted and a fear that the authorities and the public would consider them failures and close the school. This led to a defensive attitude towards the outside world, an attitude that increased the involvement of the individual member in his school, and which also resulted in a certain amount of solidarity internally. The teachers and the pupils all considered the school as a great, valuable effort, and during this period they worked at defending the valuable aspects of the school.

The school survived this crisis and was allowed to coninue its existence. The financial foundation was assured by the city of Oslo. As a justification for the grant to the school year 1968-1969 it was argued that the school democracy had had a successful start, and that it should be allowed to show its ability to survive. (11, p. 9).

It was also pointed out that the school had been working under poor classroom conditions and that it needed time and quiet to realize its plans. Beginning with the second school year the school was granted more peace for its activities.

The reactions from the outside world that first year did not only lead to the defensive attitude on the part of the school's members. The outside pressure was also revealed in the internal life of the school. What from the outside had been regarded as problems for the school also became, to a certain extent, internal problems for the school itself. A natural result of this was that the school placed emphasis on solving these problems. But with this, what were seen as weak points from the outside also became important to the Experimental Gymnasium itself (5, III-8).

For the teachers and pupils at the school there were actually other situations that it was far more important to be aware of.

After the first school year had ended and the school had been allowed to operate quietly, a teacher asked, typically enough (6, p. 80).

"What was it that was so wrong last year ?"

In an effort to answer and be self-critical, but perhaps exaggerating a bit, this same person claimed that the school had not been master of the situation in which it found itself. Because of the pressure from outside, because of a lack of experience in making a school and other internal difficulties, it was said that the members of the school became a bunch of introverts. It was also said, "We had come together on something that meant a great deal to most of us. We were so fearful of losing this valuable project that we became hysterical if everyone wasn't equally afraid, and we forgot what our real job was : To discuss what and how the school should be" (6, p. 80).

This statement is characteristic of the attitude of many of the members towards their school. They are not afraid to criticize their school. It is also a characteristic of the fact that the school wants to be in a continual state of change - in a process of continuous development.

Chapter II

GOALS AND PURPOSE

SPECIAL FEATURES OF THE SCHOOL

The school buildings

Structurally speaking the buildings give few tangible indications of the atmosphere and the environment that exist in a school. The characteristic features of a school are created mainly by those people who do their work there. The outer physical situation plays a role to the extent that it obstructs the realization of the school's tasks.

The external architectural structures that formed the frame for the Experimental Gymnasium during the first year of the school's existence told very little about the atmosphere and environment of the school. The new buildings which the school was allowed to take over at the beginning of the second year offered, and still offer impressions of something completely different.

The rooms which the Experimental Gymnasium was allowed to use at Tøyen Primary School the first year cannot be said to have been satisfactory from an experimental point of view. The Experimental Gymnasium was allotted six classrooms on the second floor, which were located in the newest wing of the primary school. The rooms were next to each other, fronting on a common corridor, and were separate from the rest of the rooms in the school. The drawing room was on the fourth floor and was used for larger gatherings, such as the "everyman's meetings".

A place for the school's office had been fixed with the help of a temporary wall in one of the classrooms. All of the rooms, as well as the corridor, were used as teaching rooms and as a place to stay. Besides these rooms the Experimental Gymnasium was able to rent special classrooms for biology, physics, and instruction in chemistry, as well as for physical education at a nearby gymnasium (Vahl School).

After a time the Experimental Gymnasium was able to arrange for its own entrance to the school, apart from the primary school. The school's schoolyard was not used by the pupils at the Experimental Gymnasium.

In the school's second year it was given premises in an old headmaster's residence that had previously belonged to the Cathedral School in Oslo. The first impression of these rooms is that there is no "school" here - in the traditional meaning of the word. Nor do the rooms exude an aura of beauty. But the school seems to be satisfied with these premises. Here the members can furnish the rooms themselves, according to needs and imagination. As they have gradually taken over more of the rooms in the building they have also made room for special rooms for various purposes. The rooms are divided among two floors and appear to be sufficient for the needs of the school.

The school now has its own office for the school leader[1] and inspector and a room for an office worker. A place to relax and a hobby room for the members have also been furnished. There is no special room for teachers in the building, but no such room is desired, either.

The expenses for maintenance, renovating, cleaning, etc. of these rooms is taken out of the school's own budget and within the stipulated framework grant. Today the school has relatively free rein in deciding how it will use its funds for, among other things, the equipping of the rooms.

The pupil material at the school

It is reasonable to assume that the circumstances surrounding the establishing of the Experimental Gymnasium have influenced the recruiting of the pupils as well as the teachers. The violent debate that developed about the school among school people and politicians created publicity for the school, on the one hand, but it also roused expectations among different groups. For those pupils who applied to the school the first year the expectations seem to have been created on the basis of the programme that the school had set up.

In an article in the book "The Experimental Gymnasium in Practice" Torild Skard (6, p. 90-94) brings out the expectations and motives which the pupils had for the school, based on the reading of 230 applications for admission to the school. Approximately one-third of the applicants emphasized the milieu and the atmosphere at the new school, and the relationship between teachers and pupils is also mentioned as being important in this context. Several pupils also gave the impression of having missed their teacher as a counsellor and a human being in the ordinary school (6, p. 93). Another important reason, mentioned by approximately one-third, was the student democracy at the new gymnasium. It was also emphasized in several of the applications that school has a duty on the purely human level, which has been omitted or neglected. Besides this there was a great deal written about personal growth and development which should take place while going to school.

Torild Skard also says that in the applications she found a somewhat unexpected characteristic among the pupils (6, p. 92). This was the importance the applicants placed on the school's effectiveness. This was mentioned in more than half of the applications, that large portions of their school days had been wasted, the working methods were inefficient and that the exploitation of the pupils' abilities was very poor in the traditional school.

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[1] See Appendix 1, 2

Several of these 230 pupils withdrew their applications at a later date, however. The reasons for this were undoubtedly many, but one of them may be explained by the fact that the school was not given the right to administer examinations. And when the school began in the fall of 1967 the number of pupils had been reduced to about 140.

No analysis of the students' applications for the following years of school has been made. It must be emphasized, therefore, that the aforementioned expectations and motives are valid only for the school's first group of applicants.

The applicants to the school are accepted following an evaluation of the applications by a special admissions committee at the school. Teachers and pupils at the school are members of this group. The guidelines for acceptance are mainly that :

1) The applicants must satisfy the ordinary requirements for educational status (valid for the gymnasiums in Oslo).
2) The applicants must be especially motivated to attend the Experimental Gymnasium in particular, and they must be aware that the school demands more effort and involvement than other schools do.
3) The school demands a certain amount of loyalty from those who want to become members.
4) The school will in principle aim at obtaining a cross-section of pupils as to scholastic standing, social attitudes and age, sex, social and geographic distribution.

The students must also tell what their parents'/guardians' attitude is to the Experimental Gymnasium, and if they have taken part in student activities previously.

The outlined criteria for admission means that the Experimental Gymnasium differs greatly from other gymnasiums in Oslo. In the ordinary gymnasium there are no other definite requirements for admission beyond the fact that the applicants must satisfy the minimum scholastic requirements. If there are more applicants than there is room for, those who have the best grades are accepted.

The student recruitment for the Experimental Gymnasium is done on a comparatively broad geographical basis. The school recruits pupils from all parts of Oslo, from communities outside Oslo and even from outside Norway. In Table 1 a summary has been set up of the distribution of the pupils according to residence (hometown) for the school year 1970/71. This information was taken from the school's files.

Table 1 : DISTRIBUTION IN PERCENTAGES OF PUPILS AT THE EXPERIMENTAL GYMNASIUM BY RESIDENCE AND CLASS LEVEL FOR THE SCHOOL YEAR 1970/71.

Class level	Hometown		Total no.
	Oslo %	Outside Oslo %	
1st class	62.7	37.3	51
2nd class	57.9	42.1	57
3rd class	60.0	40.0	50
Total	60.2	39.8	158

A relatively large number of the pupils (39.8 %) come from out of town but this group comes mainly from Oslo's neighbouring communities. The number of pupils from the neighbouring community of Baerum is less for the 1st class level than for the 2nd and 3rd class levels. This is very probably due to the fact that an experimental gymnasium for Baerum was established in 1969. For the school year 1970-71 there were two pupils from abroad attending the school, one from Sweden and one from Finland. Beginning with the school's first year and up to the present, the majority of the pupils have come from Oslo.

This geographical distribution of pupils is not usual for the municipal gymnasiums in Oslo. The schools recruit their pupils only from Oslo, with the exception of a couple of the schools. The other gymnasiums recruit their pupils by districts in Oslo.

A division of the pupils according to their year of birth shows a range in age which might be assumed to be larger than in an ordinary gymnasium. Table 2 shows the pupils' distribution by age and class level for the school year 1970/71.

~~Table 2~~ : DISTRIBUTION IN PERCENTAGES OF PUPILS AT THE EXPERIMENTAL GYMNASIUM BY YEAR OF BIRTH AND CLASS LEVEL FOR THE SCHOOL YEAR 1970/71.

Class level	Before 1950 %	1950 %	1951 %	1952 %	1953 %	1954 %	1955 %	Total number N
1st class	-	5.9	5.9	9.8	21.6	51.0	5.9	51
2nd class	3.5	3.5	8.8	26.3	47.4	10.5	-	57
3rd class	4.0	12.0	30.0	50.0	4.0	-	-	50

The variation in ages for the 1st class members is from 16-21 years and with the majority of pupils somewhat older than 17 years of age.

There is no real difference between the Experimental Gymnasium and other gymnasiums concerning the average age for the 1st class, very probably The same is true of the 2nd and 3rd classes. If the figures in Table 2 are compared to similar statistics from the first year the Experimental Gymnasium existed (12, p. 11), there are no real differences in the average ages and distribution for all three of the classes either.

If an evaluation of the student material at the Experimental Gymnasium during its first year is made, based on grades achieved in previous schooling, these appear to be somewhat poorer than the average for an ordinary Oslo group. With this Torild Skard, in her article in the book "The Experimental Gymnasium in Practice" (6, p. 91), believes that she can refute the claim that the Experimental Gymnasium was to be an "elite school" in this way. No similar investigation has been made of the later groups of students at the school. No such investigation will be made in this study, either, as it seems to be somewhat outside the sphere of this study.

What is the socio-economic background of the pupils who attend the Experimental Gymnasium ? Statistics of the occupations of bread-winners have formed the starting point for the placement of the pupils in different socio-economic groups. The classifications have been made on the basis of works by Torild Slard (11) and Oddvar Vormeland (13), who have used five different socio-economic groups :

1) Professionals
2) Office workers
3) Businessmen
4) Labourers

5) Others (Unclassifiable)

Table 3 shows the divisions into the socio-economic groups for the pupils at the Experimental Gymnasium for the school years 1967/68 and 1970/71.

Table 3 : DISTRIBUTION IN PERCENTAGES OF PUPILS AT THE EXPERIMENTAL GYMNASIUM BY SOCIO-ECONOMIC BACKGROUND FOR THE SCHOOL YEARS 1967/68 and 1970/71.

Year	Socio-economic Groups					Total no.
	1 %	2 %	3 %	4 %	5 %	
1967/68	47. 3	18. 6	14. 7	17. 1	2. 3	129
1970/71	46. 2	26. 6	12. 0	6. 3	8. 9	158

A displacement has taken place in the distribution percentages of the pupils in the various socio-economic groups from 1967/68 to 1970/71 (refer to Table 3) There are relatively fewer pupils in the category of labourers in 1970/71 than in 1967/68. The opposite is true for the office worker group. The majority of the school is recruited from the professional and the office worker groups. This last situation is not unusual in the Oslo gymnasiums, however. If comparisons with similar distributions are made for these schools it will be found that here too the labourer group is relatively smaller.

In 1964 the distribution for one year's gymnasium graduates in Oslo was : Professionals - 25. 4 %, office workers - 27. 1 %, businessmen - 24. 2 %, labourers -15. 5 % and others - 7. 8 %. (13, p. 10). Compared to these statistics there were comparatively more pupils at the Experimental Gymnasium in both 1967 and 1970 whose breadwinners were professionals, but fewer in the other occupational categories. Although the exact numbers for 1970 are not available for comparison for Oslo, it is assumed that the above ratio is also valid here.

On a national basis there are no directly comparable statistics on the basis of the groups used for the pupils at the Experimental Gymnasium. Taking the statistics for the occupational categories in 1963 that appear in "Recommendations for Reforms in the Gymnasium" (1, p. 13) as a starting point, it will be found that the pupils belonging to the category "professionals" are over-represented at the Experimental Gymnasium. Pupils belonging to the category "labourers" are under-represented.

Number of classes and number of pupils during the period 1967-1970.

The Experimental Gymnasium has a limited number of courses for those wanting to take examen artium. At the very beginning only two courses were established : an English course and a science course. These also comprise the usual offer at other gymnasiums around the country. For the school year 1970/71 the school has only one class in each course at each class level. The first year the school had six classes, with 2 English courses and 1 science course at the 1st class level, 1 English and 1 science class at the 2nd class level and at the 3rd level a combined science and English class was established. At the beginning of the school year there were 142 pupils divided among these classes.

In Table 4 there is a summary of the number of pupils at the Experimental Gymnasium during the period 1967-1971. The numbers are based on applications at the beginning of the school years.

Table 4 : NUMBER OF PUPILS AT EXPERIMENTAL GYMNASIUM BY CLASS LEVEL AND COURSE FOR PERIOD 1967/68 - 1970/71.

Class level	School year and course							
	1967/68		1968/69		1969/70		1970/71	
	Science	Eng.	Science	Eng.	Science	Eng.	Science	Eng.
1st class	31	41	27	31	23	28	25	26
2nd class	12	31	29	41	21	23	23	34
3rd class	7	19	14	26	26	42	20	30
Total	50	91	70	98	70	93	68	90

From Table 4 it will be seen that there are comparatively more pupils who choose to take the English course than take the sciences course at the Experimental Gymnasium. On the national level, however, in 1966 there were approximately just as many who chose the English course as chose the science course. (1, p. 11). The English course recruits more girls than boys, also. This is true of the Experimental Gymnasium as well as other gymnasiums around the country. In this connection it can also be noted that for the school year 1970/71 there are almost as many boys (49. 4 %) as girls (50. 6 %) at the Experimental Gymnasium. The corresponding statistics for Oslo in 1966 were 56. 8% and 43. 2 %, respectively. (1, p. 13).

Considering the number of pupils and classes at the Experimental Gymnasium in relation to the number of pupils and classes at other Oslo gymnasiums, the school appears as a small gymnasium. Most gymnasiums in Oslo have at least two parallel classes in both the science and English courses. Most of them have third and fourth parallel classes.

Teachers at the school

For the school year 1967/68 the Experimental Gymnasium had 32 teachers engaged in teaching. But 26 of these were part-time teachers, paid by the hour. These numbers reveal very brusquely that the school must have had great difficulties in hiring permanent teachers that first year. This could also be explained by the fact that it was very unclear as to whether the school would be able to get under way or not. The development of the school has, however, had a trend towards more of the teachers being hired permanently. For the school year 1969/70 there were 11 full-time teachers and 7 part-time teachers. The figures are about the same for 1970/71.

The hiring of teachers at the Experimental Gymnasium is very different from the practice at the other gymnasiums. The teachers are hired by the year and do not become "permanent" in the usual meaning of the word. As in other gymnasiums the authorities/Ministry must approve the appointments for teaching positions. The teachers are paid according to the valid tariffs. The requirements for education are the same as those at an ordinary gymnasium.

Today the Experimental Gymnasium has very few teachers who have teaching experience from the ordinary gymnasium. According to a statement by the first leader of the school there are few or none of the gymnasium teachers from the other gymnasiums who dared begin at the Experimental Gymnasium. Most of those who began as permanently hired teachers were fairly inexperienced as teachers. Several of them came as newly graduated candidates from the University in Oslo.

Another factor which may affect the recruitment of teachers to the Experimental Gymnasium is that experienced teachers will usually have to leave a permanent position and change over to a yearly contract in order to move to the Experimental Gymnasium.

A large portion of idealism is undoubtedly necessary on the part of a teacher for him/her to begin at the Experimental Gymnasium. The school's first leader also claims that the motives of the teachers for beginning at the gymnasium were somewhat the same as those of the pupils'. They would not have been able to stand teaching in an ordinary gymnasium. The prehistory of this school would also indicate that the school expected something special from its teachers. Like the students they would also have to be willing to build a school and accept the elements of uncertainty which such work would entail.

PURPOSE

Objectives and purpose of establishment

In Chapter 1.2. more details were given of the various views that were expressed on the establishment of the Experimental Gymnasium in Oslo. The objective for the active formulators seemed at any rate to be clear on one point: They wanted to create a different school. Or, as it was stated in the appeal:

> "Concretely this means that we will work to establish a new upper secondary school in Oslo as soon as possible."

It was only later that a more detailed objective for the school's activity was formulated, in September 1966, when a proposal for the formal objectives of the school was presented in a rough draft. In this proposal it was stated (3, pp. 21-22):

> "The objective of the Experimental Gymnasium is to gather experience which can change the present school system. The objective is also to be an alternative to the existing gymnasium."

In a more detailed definition of the school's duties it was also said:

"1. The activity of the school shall be planned in such a way that it serves the personal growth and development of the pupils in the broadest possible way. This means:
    a) extensive pupil democracy
    b) respect for the freedom of the individual and his responsibility
    c) the introduction of elective subjects outside of the curriculum.
2. The teacher is to be the expert and counsellor, but shall not act authoritatively.
3. Emphasis is to be placed on cooperation among the pupils mutually, between pupil and teacher and among the teachers.
4. Experimental activities are to be engaged in as much as possible on groups of subjects, the integration and coordination of subjects, of classes, of school hours and on the division into groups.
5. The experimental activity must also aim at achieving other forms and norms for the evaluation of knowledge in the final examinations than these now valid."

The main objective as expressed here for the school appears to be created because of reaction to the present gymnasium. The prehistory of the new gymnasium also seems to show this (Refer to Chap. I, 2). During this first period there is also the impression that the objectives of the school were often negatively defined. There was talk of making a school that was not like the old school. In the draft, however, it may be noted how an effort has been made to set up a concrete alternative to today's school.

With the more concretely formulated split objective one catches a glimpse of how the school will prove to be an alternative. The path to the goal goes through changes in the interhuman relationships and through experimental activities of various types. But the goal also appears to be on a level directed at the individual. There is talk of growth and development of the individual person.

At the beginning the school's leader stated that this latter objective is the most important goal for the Experimental Gymnasium : "To serve the growth and development of the pupils in the broadest possible way." (6, p. 15).

In the current laws for the school (refer to Appendix 1) it will be found that this objective-aspect has now been brought into the terms of reference. It states there :

> "Through experimental activity of an educational, subject and organizational type the Experimental Gymnasium in Oslo will gather experience which can aid in changing the form of the present gymnasium. This gymnasium is also to be an alternative to today's gymnasium. The school will be based on school democracy in order to create the basis for the growth and development of the pupils in the broadest possible way."

This paragraph, which has remained unchanged since the beginning of the school, has included several of the different partial objectives which the first draft had included. It is also important in the context of this study that the words "school democracy" have been included in the paragraph. It is in just this sector that the Experimental Gymnasium in practice has shown itself to differ greatly from other schools. Beside which, the question as to who or which bodies would have authority in the school was one of the most controversial points in the establishment of the school.

In order to create the basis for the growth and development of the pupils it thus appeared necessary, according to the founders of the school, to develop school democracy. The school's first leader, Mosse Jørgensen, expressed this in her speech at the opening of the school :"To serve the growth and development of the pupils in the broadest possible way" (6, p. 15) must be done by allowing the pupils greater freedom and responsibility than is now the case in the traditional gymnasium. She said that at the Experimental Gymnasium the pupils would actively participate in the administration of the school (6, p. 16). In this context it is worth noting that the concept of power is not brought in. The concept of cooperation is a phrase that is brought in instead : "We believe that an institution can be administered by cooperation among all of those who are connected with it." (6, p. 17).

Words such as "independence" and "feelings of responsibility" are also often used by those who took the initiative for the school, when there is talk of the pupils' development. It also appeared to be an underlying goal for the school to give the pupils a real opportunity to learn this. But the prerequisites for this appear to lie in the environment which the school can manage to create. Respect for the individual's freedom and responsibility, the teacher as a "non-authoritarian" professional, cooperation among the school's members - all this is considered necessary to create the environment which the school needed to realize its objective.

Without a more thorough analysis of the differences in the objectives of the traditional gymnasium (refer to Chap. I. 1) and those of the Experimental Gymnasium being made here, it must be said that the Experimental Gymnasium's objectives operate on a broader basis. The development of the pupils to the greatest possible extent will, among other things, include an upbringing in the "Christian, ethical, social aesthetic and physical" spheres. It also includes the pupils' absorption of knowledge and the developing og their capacities and talents. But at the same time it can include something more - the development of independence and the feeling of responsibility.

Even so, the most important difference undoubtedly is to be found in the fact that the traditional gymnasium, formally speaking, sets up a goal that aims at development in a previously determined direction, while the Experimental Gymnasium has a goal that is to "develop one's self in freedom" (3, p. 26).

It is also tempting to believe that something of the reaction against the school was on exactly this point - on this disagreement between the two goals.

Development of objectives and purpose

The terms of reference for the Experimental Gymnasium have retained their form and content during the period the school has existed. Externally and formally it may be said that with this the school has retained its objectives the whole time. In practice however there seem to have been chahges. One of the gymnasium students who took the initiative for the school mentions, in an interview on this question, that the school has passed through a development from a more extroverted to a more introspective attitude, and that the school today seems much less revolutionary than it did at the beginning. Attention now seems to be directed more towards the internal processes in the school than had been the case earlier.

At times the school has been criticized on just this point - both by the members themselves and from persons outside the school. According to the school's terms of reference the school's task is, among other things, to aim at a change of the existing system.

The information organ, "On School Democracy", which is sent out by the school, explains this shifting in the school's activities by the fact that it is a strenuous and time-consuming task to build up the Experimental Gymnasium. The members have thus just not had the excess energy necessary for externally-oriented work (2, p. 1). In this connection the present leader of the school, Erik Melvold, has said that the school may possibly have become more oriented towards reality - that first they must work to create a "school" in order to achieve the external goals.

The first leader of the school expresses the fact that she regards the terms of reference as a platform. But it appears that the school's members in practice do not have this joint platform to stand on. She believes that the disagreement on the realization of the objectives is too great for this.

She also says that there are two parts of the school's aims which seem to contribute to this disagreement. One is what one can call the individual- directed perspective and the other is the collective perspective. On the one hand the school seeks to realize the development of the individual in the broadest sense possible, but at the same time the school is to serve as a gymnasium, a school with alternative goals. On the theoretical level it can be said that, to a certain degree, both of these aims appear to be approved or accepted by the members of the school. Purely and concretely interpreted, or in practice, however, there is definitely strong disagreement. The first leader of the school also seems to believe that the individual-oriented perspective is the most prominent in the school today. She also believes that the school has not managed to create the feeling of solidarity which must exist in order that the members can stand on the joint platform which the terms of reference form.

On the basis of such a two-faceted evaluation of the purpose of the school it is difficult ot state just how successful the school has been up to the present in achieving its aims. The answer to such a stating of the problem, given by the school's first leader, contained both a yes and a no. To a certain extent the school has managed to achieve its individual-directed task, but only to a lesser degree has it mastered its collective duty. The school's present leader cuts through these thoughts and says that the very existence of the school is a sign of success.

It would be wrong to measure the Experimental Gymnasium of the basis of absolute factors. These measures just do not exist for this school. The best characteristic is undoubtedly the statement made in a speech at the opening of the school : "The Norwegian Experimental Gymnasium is not a finished product" (6, p. 17). With this something essential has been said about the evaluation of the school. In the postscript in the book "The Experimental Gymnasium in Practice" (6, p. 155), it is stated clearly that any criticism of the school must be made with this in mind, that the only natural state for the Experimental Gymnasium is for it to be in a state of change. It is even said that this is to be an axiom. This situation is also implicit in the objectives of the school when there is any talk of gathering experience through experimental activity and of forming the basis for the pupils' growth and development. The use of school democracy as a basis for the total activity of the school also means a continuous development for the individual and thus for the interaction between the different individuals. School democracy built into the system means that the system can be in a continuous process of change/development.

Considered from this point of view, one of the pupils who took the initiative to start the school believes that the school has been successful. This is on the basis of the individual-oriented level. For this person the development of the individual is what is central. To be one's self, to be allowed to express one's self in the environment contributes to the creation of the independent individual. In this way the school helps to fulfil its purpose.

From a research group which has been following developments at the Experimental Gymnasium (lecturer Harriet Holter and colleagues, Institute for Social Research), in a report to the school it was stated that the school is not to be considered as a completely formed structure, but as a school in a state of constant re-forming by the pupils and teachers (7, p. 3).

As a result of this re-forming process the concrete and real split objectives and tasks constantly assume changing forms in the school. The school's history up to the present also shows this situation. The continual interaction between persons at the school brings new ideas into focus, ideas that are concretized in various projects both on the scholastic level and on the administrative level. In Chapter III an effort will be made to discuss in more detail those activities that have sprung from this internal process of development.

Up until now little attention has been paid to those goals that are operational for the individual at the Experimental Gymnasium. It is not possible to conceal the fact that the school is a gymnasium, a school that is to prepare the pupils for a final examination after three years of study. The activities at the Experimental Gymnasium cannot help being marked by this. In his analysis of the objectives at the Experimental Gymnasium Kjell Gilje mentions that this school's primary objective has become the same as the primary objective for other gymnasium (3, p. 31). He concludes, on the basis of interviews with 71 pupils during the school year 1968/69, that the primary objective of the school is to see to it that the pupils receive the best grades possible in their examinations.

Such a conclusion does not seem to be in agreement with other, expressed objectives for the gymnasium. For many pupils it can be an objective, but in this case it must be one of several operational values. The preceding report should tell something of this.

The examen artium is often brought out by the members of the Experimental Gymnasium as a factor that is an obstacle to a realization of the school's goals. The examination-oriented activities are given priority at the cost of the other values which the school wishes to promote. The information organ, "On School Democracy", claims that the form which the examen artium has is a major stumbling block for an actual democratizing of the school (2, p. 3). But it is true for the Experimental Gymnasium, as it is for other gymnasiums, that the examination form exerts a directly inhibiting influence on the development in the school (2, p. 10). It is apparent that this opinion is very widespread at the Experimental Gymnasium.

Comprehension of objectives and purpose at the school today

In order to form an impression of how the pupils at the school today look on the school and its tasks, the author of this report made a study of these conditions. A questionnaire was drawn up that contained questions on the views of the pupils on the school's aims, its working methods, the relations between teacher and pupil, scholastic and instructional problems and the functions of school democracy (refer to Appendix 2).

The questions were put in such a way that the pupils could answer freely or use limited answer choices. In this section answers to questions asked on the school's aims and duties and the interest of parents and other interested parties in the school will be presented.

In Chapter V the answers will be given to a number of other questions that are of importance in summarizing the effects of changes at the Experimental Gymnasium.

Prior to the investigation the pupils at the Experimental Gymnasium were oriented to the purpose of the present study report and to the fact that information from the pupils on essential aspects of the gymnasium's activity was desired. This investigation was thus no surprise to the members of the school. The questionnaires were distributed to the various classes by the class advisers on the day it was assumed as many as possible of the pupils would be present.

The principle of non-compulsory attendance for classes makes it very difficult for any investigation of this sort to be made at the Experimental Gymnasium. By no means all of the pupils were present on this particular day. In a follow-up study by the class advisers, however, pupils who had not been present on the day in question were allowed to answer the questionnaire at a later date. It is not believed that there is any bias in the material received because some of the questionnaires have been filled out at a later date. The basis for this assumption is the fact that the questionnaire required an independent evaluation method by the pupils, due to the questions aiming at the individual's satisfaction with school conditions.

In spite of the follow-up work a relatively large group of pupils did not answer the questionnaire. In Table 5 a summary has been set up as to how many pupils at the various class levels answered the questionnaire.

Table 5 : NUMBER OF PUPILS AT THE VARIOUS CLASS LEVELS WHO ANSWERED THE QUESTIONNAIRE.

	Class level			Total
	1	2	3	
Total number of pupils	57	51	50	158
Answers received	40	29	27	96
Questionnaires completely filled out	38	24	17	78

From Table 5 it is apparent that of the 158 pupils at the school 96 of them answered the questionnaire. This represents a return-percentage of 60. 8%. Of these 96 answers, however, there were 17 who had made incomplete answers. These comprise 17.7% of the received material. This leaves 78 answers that will form the basis for a description of the pupils' opinions on the Experimental Gymnasium. It should be emphasized, however, that even with the above-mentioned "defection" an answer percentage of approximately 50% remains.

With a return-percentage of about 50% it would be assumed that the material does not completely represent the pupils' opinions at the Experimental Gymnasium. From Table 5 it can also be seen that there are comparatively fewer pupils from the 2nd and 3rd class levels than pupils from the 1st class level who have turned in answers. Therefore it is probable that the material is more representative of the pupils at the 1st class level than of the pupils at the 2nd and 3rd levels. Also, 11% more girls than boys have answered the questionnaire. Since there are approximately just as many boys as girls at the Experimental Gymnasium this material is less representative for the boys than the girls at the school.

As regards the approximately 40 % of the students who did not turn in answers, no assumptions have been made as to their attitudes towards the questions. It may be assumed, however, that a certain percentage of this group did not answer because of a negative attitude to this current study of the Experimental Gymnasium. For the majority of the others it is assumed that incidental circumstances have caused the questionnaires to remain unanswered.

Table 5 shows, as previously mentioned, that 17 of the pupils had given incomplete answers. Most of these gave a reason why they had not answered the form. Four of these show a general unwillingness to answer the questionnaire or a lack of interest in the matter. Thirteen of the reasons were that they disagree with the current study of the gymnasium that is being carried out. This is based on the fact that they are opposed to OECD as an organization and everything that it stands for.

It is also very probable that several of those pupils who did not hand in answers at all have had an attitude similar to these 13 whose opinions are described in the paragraph above.

In the following presentation of the answers from those 78 pupils who filled out the questionnaire completely it must be emphasized that the material is not completely representative of the pupils at the Experimental Gymnasium. As mentioned above, this is especially true of the pupils on the 2nd and 3rd class levels and of the boys at the school.

Question 1 : What do you think the school's objectives and duties should be ?

This was the first question the pupils were given to answer. It was given them in a free form, and 93. 6 % of the pupils had made a statement on this point.

From the material it is apparent that there are different opinions on what the school's objectives and duties should be. In many of the answers the statement tends towards those objectives set up in the terms of reference for the school, but with varying emphasis placed on the different aspects. A relatively large group of pupils, for instance, believe that the school's task is to reform or change the existing school system, including the gymnasium and the examen artium. Within this group there is a smaller group again who have an expressed revolutionary aim based on political opinions. Another sub-group appears to be more moderate. By acting as an example the school will be able to achieve the same aims. In several of the statements in this group there is an attitude indicating that "we will show them that it is possible and how it can be done".

Besides statements such as those mentioned here there are the statements from pupils who emphasize that the school is to provide for a development of the pupils' independence and feeling of responsibility. A large group of pupils brought up this aspect of the objectives. Some of the pupils also mention this along with the reform idea, but some of them bring it out by itself. Considering a cross-section of this group there is a smaller group that places emphasis on social consciousness - making the pupils aware of what is going on around them. Others use the word "independence".

From the material it also appears that many of the students place importance on creating a democracy in the school. The words "democracy-cooperation" run like a red thread through several of the answers. Otherwise there was a comparatively small group who brought out an educational perspective in their statements. This appeared to a much greater extent in the answers to the next question (2), however :

Question 2 : In what way do you think that the school can best realize its objectives ?

The return-percentage on this question was 73. 1 %. In addition, there was a higher percentage of boys than girls (about 10 %) who answered the question. Pupils who have not answered this question belong mainly to the 1st class level. The statements given here can be placed in two main categories : One view that turns in on the school and a view that looks outward. The first view appears to be that of a minority and is expressed by the idea, among other things, that the pupils must be made aware of their responsibility to their own and the school's situation. Under this the educational/instructional aspect is also brought in. The school can realize its objectives through experimentation and research in teaching and through cooperation between teacher-pupil and pupil-pupil. In other words this is a group occupied by the internal life of the school.

The extrovert view is expressed in statements that the school itself must offer information on its activities. Here is a large group that believes the school must engage in school-political activity. There must be discussion and understanding of what is going on at the Experimental Gymnasium. Several of the statements tend towards the idea that the authorities must allow the school greater freedom in order for it to achieve its goals. This is true of the curriculum, the form of examen artium and the economy, among other things. Several of the students also mention that the authorities' lack of comprehension of the school's activities is an obstacle to the realization of the objectives.

Some pupils bring up the point that the school cannot be measured by any absolute factor, that it is in a process of continual development and that it will never be perfect. This process is in itself an objective.

In conjunction with the pupils bringing in the authorities' lack of understanding of the school it could be interesting to look at the pupils' answer to Question 17, which discussed the interest of the Central Government authorities in the school. The question read :

> Are you satisfied with the interest which the State Council on Secondary Education and the Ministry for Church and Education have shown in the school ?

The answers revealed that approximately 15 % were "fairly" satisfied and about 50 % were "poorly" satisfied with the interest shown by these authorities. The question was left unanswered by 30 % of the pupils. The comments to the question reinforce this negative evaluation of the interest, and it is pointed out at the same time that their comprehension is poor.

The answers to this question confirm the statements made under Question 2.

Question 4 took up the statement of the problem from the more general Question 2, but formulated with the idea of more special experience :

Question 4 : Do you think that the school has managed, during its period of existence, to realize the objectives and tasks it set for itself ?

The answers to the limited answer choices to this question are summarized in Table 6. This shows that approximately 45 % of the pupils believe that the school has not realized its objectives and tasks. About 11 % believe "yes", while approximately 18 % think both "yes and no". This answer-distribution strengthens the impression from Question 2 ; that the pupils have a very differentiated view of the school and that the school still has work to do before its objectives are attained. In a supplementary question under this point, on what is responsible for the school having attained or not having attained its objectives, some of the same arguments as those given previously under Questions 1 and 2 are repeated. The problems on introversion and extroversion are repeated, as well as the above-mentioned obstacles in the form of the examinations and the attitude of the authorities. A couple of answers point to the internal situation in the school, however : From beforehand the pupils are not used to making their own decisions and democracy is not a form of cooperation and administration that they are used to.

Table 6 : DISTRIBUTION IN PERCENTAGES OF PUPILS' ANSWERS TO QUESTION 4, DISTRIBUTED ACCORDING TO GIVEN ANSWER CHOICES

Not answered %	Yes %	No %	Yes & No %	Don't know %	Total number N
14. 1	11. 5	45. 0	17. 9	11. 5	78

Question 3 : Do you agree with the objectives of the school as they are expressed in the laws of the school ?

To this question 64. 1 % of the pupils answered "yes". Of the answers 23. 1 % answered "don't know", while 3. 8 % answered "no". No answer was checked off by 9. 0 %. Several of these gave a free answer, instead. The answer-distribution indicates a relatively large support for the school's formal objectives, a fact also expressed under Question 1. In the comments to the question it is claimed by several people that the terms of reference do not function in practice, and that they have little effect on the life of the school. In practice, one person claims, the objective for the school is constantly changing and should not, therefore, be expressed in the laws.

Question 6 : Have you the impression that the aims of the school have changed during the time it has existed ?

The answers to this question showed that the pupils disagree very much as to how much any changes have taken place. Table 7 shows that 30. 8 % think "yes", 21.8 % think "no", and 34.5 % "don't know". This uncertainty as to the changes appears, naturally enough, to be greatest at the 1st year level. Of these 56.8 % have answered "don't know", while no one answered at the 3 rd class level.

Table 7 : DISTRIBUTION BY PERCENTAGES OF PUPILS' ANSWERS TO QUESTION 6, DIVIDED ACCORDING TO GIVEN ANSWER CHOICES.

Not answered %	Yes %	No %	Don't know %	Yes & No %	Total number N
10.3	30.8	21.8	34.5	2.6	78

The answer pattern to this question may have been influenced by different interpretations of the word "aims" - whether it meant the formal objectives or the practical, operational goals. In spite of this possible source of mistakes, the disagreement in the answers is in accordance with the impressions otherwise gained in talks with the teachers and what has been mentioned in Chapter II. 2. 1.

The pupils' opinion on the understanding of and interest in the school offers a picture of how the school regards its own situation. A question was also asked as to how the pupils believed that "most people" regarded the school, in order to receive an impression of how the pupils thought that people outside looked on the school.

Question 5 : Do you believe that most people outside of the school understand the purpose of the school ?

The answers to this question show with all possible clarity, even though the term "most people" is vague, that the pupils consider that they are in a position of opposition to people outside of the school. The question was answered "no" by 74.4 % of the pupils, 6.4 % answered "yes", while 11.5 % answered "don't know". None of the answers were checked by 5.1 %. The majority of those students who handed in the questionnaire thus believe that "most people" do not understand the purpose of the school. This is perhaps one of the reasons for the desire expressed by the school to engage in information and reporting activities in order to spread its ideas and to increase an understanding of them.

How do the pupils regard their parents' interest in the school ? This problem was taken up in Question 14 :

Are you satisfied with the interest which your parents have shown in the school and its work ?

The distribution of answers to the limited answer choices is shown in Table 8. It appears that approximately half of the pupils are satisfied with their parents' interest in the school.

Table 8 : DISTRIBUTION IN PERCENTAGES OF PUPILS' ANSWERS TO QUESTION 17, DIVIDED ACCORDING TO GIVEN ANSWER CHOICES.

Not answered %	Extremely well %	Very well %	Well enough %	Poorly satisfied %	Total number %
9.0	25.6	23.1	21.8	20.5	78

A relatively large group, 20.5 %, are "poorly" satisfied. In the freely written answers to the question it is claimed by several students that their parents have no understanding of the school's activities. A certain scepticism is expressed. Is is said that their parents are mainly interested in the pupils passing their examen artium. In spite of the fact that approximately half of the pupils are satisfied with their parents' interest it may be said, with this, that several of the students have the impression that the school is in a position of opposition to their parents' interests.

From the above report it is apparent that the pupils have varying views on the objectives and tasks of the school. But this disagreement is sharpest on the purely practical level. In talks with teachers at the school this impression was strengthened. The school's first leader expressed the fact that the division lines cut across the opinions of both the teachers and the pupils, but are most obvious between those who take an active interest and those who have a passive attitude towards the Experimental Gymnasium. It also appears that the teachers are more loyal to the school than the pupils are. This difference, she feels, may be due more to a feeling of helplessness than disloyalty on the part of the pupils.

The school's present teacher said that there are two main groups that are in a state of opposition to each other at the school. On the one hand there is a group that believes that the school must be a completely free school, independent of the existing examinations system. The other group has its starting point in the fact that the school is a gymnasium and that this must determine the school's activities.

This disagreement is also pointed out by one of the gymnasium students who took the initiative to start the school. He also believes that there are four groups in the school today, each of which has its own objectives.

In the first place there is a small group that places great emphasis on the school-political revolution, with the idea of changing other schools. Here the dissemination of information is considered an important part in the battle to achieve the goal. Secondly, there is a group emphasizing internal interests. Human development is the central point. This group is opposed to the examen artium as a form of evaluation. Next, there is a conservative group that may be described as a "responsibility-conscious" group. To a great extent this group is helping to develop the school further. The group wants a good relationship with the authorities. And finally, the fourth group that is a so-called " egocentric group", that more or less passively goes to school, with the members wanting to take their examen artium.

Each of these groups, he believes, is contributing in varying degrees to the support of the school's work. But because of the disagreement there is a constant tension in the school. In reality this tension helps to push the school forward - in a constant process of change or development.

The above-mentioned evaluation of the members' views on the school, made by individuals, seems to support the variegated picture received of the pupils' views of the school, according to the study that was carried out. Beginning with the picture we have tried draw here of the school's objectives and purpose, the development of the objectives and the purpose, the acceptance of and support for the objectives that were set up, the next chapter will take up a description of the structure and content of the Experimental Gymnasium. Emphasis will then be placed on the innovation work and the so-called "advanced practices" in the school.

Chapter III

DEVELOPMENT WORK AT THE EXPERIMENTAL GYMNASIUM

INNOVATION ACTIVITIES AT THE SCHOOL

The structure of the school democracy

A description of the structure of the Experimental Gymnasium would, of course, have to place great emphasis on the underlying idea of the school. If this idea seems to be vaguely founded or expressed, the school has, even so, with its objectives, built up something concrete. The previous chapters should show, with all possible clarity, what the school wanted to do and what it wanted to build. The development of school democracy is, for the school itself, the most important change that has been carried out at this new gymnasium.

The information organ "On School Democracy", says very plainly that it is this experiment with school democracy that is the most important feature of the Experimental Gymnasium in Oslo (2, p. 1). For an observer who wants to describe the school on the basis of his own previous experiences, this innovation or change also seems to be the most important factor at the school.

An understanding of the activity at this gymnasium must also necessarily be based on the idea of school democracy. To the creators of the school it was very important to concentrate on the school-democratic ideas in building up the new school. Carried out to its logical conclusion, this would have to lead to all participants having complete responsibility for the activity of the school. This view is also expressed by the decision-making bodies at the Experimental Gymnasium.

The school's highest authority is the "General Session". This is the school's controlling body and takes up for discussion all questions concerning the principle guidelines of the school and the welfare of the members (refer to Appendix 1). Ordinary motions passed at the Everyman's Meeting require a simple majority, changes in the by-laws require a 2/3 majority, however, and must be passed twice, with an interval of at least one month in order to be valid

All of the members of the school, pupils and teachers, have the right to attend meetings, with equal rights to speak and vote. This body is led by a board of five members, four pupils and one teacher, who are elected for one semester. These members draw up the agenda, and two of them lead the Everyman's Meeting. Normally this meeting is held once a week.

The Council is the school's executive body. It makes recommendations on matters taken up at the General Session and always on educational and scholastic matters, new experiments and subjects. It is also a recommending body for all of the positions at the school. The Council is also formally responsible for the admission of new pupils, but in practice this is left to an "admissions group", elected by the General Session. The Council has a one-time postponement veto on decisions passed at the General Session.

The Council is comprised of four pupils, three teachers, the leader of the school and a representative of the parents. Also present at the Council meetings are a representative for the General Session board, the office worker and the school's inspector. These latter persons do not have the right to vote. Normally these Council meetings are open, so that everyone may attend and participate in the negotiations. They are closed only when persons are being discussed.

The Council has meetings twice a week and the members of this body are elected for six months at a time. The various groups connected with this body, the pupils, the teachers and the parents, each elect their own representatives.

In the traditional gymnasium there is a headmaster who is responsible for the administrative leadership of the school, but who also has the authority to decide matters according to guidelines handed down by the Ministry. The school leader of the Experimental Gymnasium takes care of the everyday, practical administration of the school. The guidelines for the leader's activity are, on the other hand, set by the Everyman's Meeting and the Council.

The school leader is elected by the General Session. It is a principle of this school that this job of leader will be held by the teachers in turn. Up to the present the leaders have held this position for two-year periods, but this is not a pre-determined period.

Besides the school leader the "administrative unit" of the school consists of an inspector and an office worker. The inspector is given those duties usually carried out by an inspector in the gymnasium, but several of the duties have been decentralized to smaller working groups. Both the inspector and the school leader have had their teaching hours reduced by five and ten hours per week, respectively.

The Experimental Gymnasium also operates with groups similar to those in the ordinary gymnasium. These are class meetings, class councils and parents' meetings. The class meetings which discuss current social and activity problems that specifically concern the class or one of its members, also elects a representative for the class.

The parents have formal contact with the school through the parents' meetings which are held both for the individual class and for the whole school. The parents, teachers and pupils all attend these.

It should be noted that no organized teachers' meetings are held at the school.

Organization of educational activities

The democratic ideas of the creators of the Experimental Gymnasium have obviously concretized in the decision making processes of the school. It does not appear that the school has managed to realize its ideas in the areas of subjects and teaching to the same extent. The major hindrances for this, from the school's point of view, are discussed in Chapters I and II. In this context the situation should be noted that the authorities, at any rate during the school's first few years, were very cautious about giving permission for experimental activities in these sectors. Where the first year was concerned this led to the school's concentrating on expanding the school-democratic functions. Also, at an early point it was recommended to the school by the National Council for Innovation in Education (8, p. 462) that it should not begin with any drastic changes in the scholastic and teaching areas right away. The Council believed that these changes could be made gradually, when the school had established itself as an institution. During the school year 1967/68 the activity in the school was also mostly characterized by the development of the cooperative forms and school democracy, and by the trial of new educational methods. The organization of the instruction itself was mainly carried out in a fairly traditional manner, in other words on the pattern of the ordinary gymnasium.

Where the class and course structure at the Experimental Gymnasium was concerned the division into classes at each class level and in each course, the English and the science courses, was maintained to a great extent for the school year 1967/68. The main innovation in this field has been a gradual splitting up of the pupils' groups, but the class structure itself has been retained. Several people at the school claim that group work is the most functionally feasible working form that the school has.

However, the school's present leader claims that a certain dissolution of the class structure at the school has taken place in two areas : there has been a horizontal class erasure, in which the principle has been an integration of instruction on the same class level. At the same time a vertical erasure of the classes has taken place, in which there has been an integration of the instruction among the class levels. It must be emphasized that this form of organizing the instruction has been most difficult to implement for the major subjects, and in particular for the mathematical/natural science subjects. Where the science courses are concerned the instruction today is given in individual classes or in groups at the different class levels. It has been far easier to adapt the social orientation subjects and the aesthetic subjects to an integration model.

During the school year 1969/70 the Experimental Gymnasium made its most important step in the direction of an experiment on the integration of instruction in the various subjects. With this the school attempted to cut across the subjects that were a part of the normal curriculum as well as the more "personal interests" subjects. The concrete plans for this instruction were drawn up by an educational group composed of teachers and pupils. Beginning in the fall of 1969 an introductory pattern was put into operation, called internally the "core subject plan" for the new 1st class-level students. There was a split motivation for this plan : in the first place it was desirable that the pupils be given a broad introduction to the special working form for the Experimental Gymnasium. In the second place, it was desirable that the pupils meet their own time and their own situation as human beings. With this motivation the subject areas were divided into three main parts, the aesthetic subjects, the contemporary-orientation subjects and the natural sciences.

Practically the plan was arranged so that the new pupils were divided into four groups when the class units and the courses divisions were dissolved. Each group consisted of about 13 pupils and had a participating teacher.

The "core-subject plan" was only tried for the first year students that one semester. Beginning with the fall of 1970 the school chose to try another plan, one which the school itself calls "bundne" subjects and theme-teaching. The plan includes all of the school's classes. It is described as a continuation of the core-subject plan. By "bundne" subjects is meant those subjects demanding a relatively programmed and systematic instruction, such as mathematics and the second and third foreign language. This instruction has been planned according to a traditional pattern. A division is made here among the various courses and classes and an ordinary schedule is followed. There is mainly classroom teaching. "Theme teaching" is based on certain themes which the teachers and the pupils together want to work on. In these "theme" plans an effort is made to integrate the instruction in the freer subjects, such as history, Norwegian and English. For this "theme" plan the school year is divided into five-week periods and at the end of each period each group presents the results of its work in the form of a written report. In this plan the dividing lines between the courses at the school have been wiped out and, in part, the division between the class levels, also. During the first period there were three themes on which work was done : "EEC", "The City" and "Examinations".

Concerning the teaching time for the "bundne" subject plans and the "theme-teaching" plan, three days a week have been allotted to each of the plans.

In the outlined form for the organization of teaching in 1970/71 the Experimental Gymnasium has broken away from the traditional form of schedule planning in the gymnasium. This change appears to have risen partially from the desire to consider the subjects more in relation to each other and partly from the desire to try new ways of working and methods. These wishes must be considered on the basis of the reaction to current practice in the ordinary gymnasium. It should be noted here, however, that the new reform-gymnasiums (refer Chapter I. 1) have also begun with similar reform plans.

From the very beginning of the Experimental Gymnasium it was an expressed desire to coordinate subjects and hours. During the school year 1967/68 however, the practical difficulties were too great to allow the school to make any particular changes in this area. On the premises at Tøyen Primary School instruction had to be spread throughout the whole day, from 9 o'clock in the morning to 8 o'clock in the evening, among other things. Later, developments have tended toward the merging of the subjects into blocs, with fewer subjects per day. Today the school day is divided into single, double or triple hours, according to need. In the middle of the day time has also been allowed for a long intermission of about one hour. During this intermission activities such as council meetings, class council meetings and group meetings of various types are carried on.

According to the organ "On School Democracy" (2, p. 3) one of the school's great problems is that the school is restricted by the demands made by the examen artium. This fact influences to a great degree the offers the school can make in the curriculum area . This situation is officially considered as an obstacle to a real democratizing of the school by the Experimental Gymnasium: "It is a sector where they (the pupils) are not allowed to take the responsibility for their own work, namely the curriculum" (2, p. 3).

In recent years the Experimental Gymnasium has had the opportunity to engage in more extensive experimental activity in the academic sphere. In mathematics the school has changed over to a modernized curriculum with the use of set theory and logic. Instruction is also given in electronic data processing. In this field the school has contributed to a reformation in the teaching of mathematics in the gymnasium. The school has already given a couple of seminars in electronic data processing for teachers in the upper schools.

Experimental teaching is carried out in several other subjects at the school. These experiments are mainly included among those experiments carried out in the ordinary gymnasium. In particular there have been experiments in Norwegian class with drama and a choice of French, Spanish or Russian as a third foreign language.

Among subjects not included for the ordinary examen artium the school can offer instruction in music and forming. "Forming" includes drawing/painting, weaving, textile printing, working with enamel and with ceramics. Drama also belongs to this group of elective subjects.

The school places great emphasis on the a esthetic subjects. They represent an important part in the realization of one of the fundamental ideas for the Experimental Gymnasium : a planning of the school activities so that the individual can develop himself to as great an extent as possible. This group of subjects encourages the pupils to make experiments, trial and errors. Through this idea of activity the school also believes that it promotes social contact among the individual pupils at the school outside of the more "intellectual" type of subject.

The organization of teaching at the Experimental Gymnasium is, as it is at other schools, primarily aimed at fulfilling those objectives set for the school and the individual subjects. One result of this is that an effort is made to adapt the learning activities and the environment so that they may best serve the planned goals. For the Experimental Gymnasium the democratic fundamental ideas are the supporting structure for all of its operations. The school-democratic structure is a sign of this. But this situation is also expressed in the structure and content of the instruction. It is just as important, however, to be aware of the educational processes in the structure. From a school's point of view there is supposed to be a relationship between these processes and the major objectives.

The working methods and the methods of teaching at the Experimental Gymnasium are marked by the social structure and the environment that the school has wanted to create. The social structural upheaval has been of direct importance for the working form used in the teaching. The conditions or principles that make the school differ to a great extent from other schools can be pointed out ; that there is no compulsory attendance or compulsory assignments. This lack of compulsory attendance and assignments is considered by the members of the Experimental Gymnasium to be closely connected with the democratic process in the school. A standing question and often a source of conflict at the school then is, how can the students become involved in their subjects when they can themselves choose or not choose ? The experiments in the reorganization of the teaching units and the experiments in different subjects have been one path followed by the Experimental Gymnasium. Another way lies in the working methods that are utilized. The word "cooperation" becomes a key word in this context, but it is also a way of working for the members of the school. In teaching this has resulted in the fact that the teacher has no authority to assign work projects to the students. The teaching situation for the individual pupil thus is characterized by the independence and feeling of responsibility felt by each of them. The principles of freedom of attendance and freedom from homework will also have consequences for the whole of the working form that is used.

Today the group work is the dominant working method used at the Experimental Gymnasium. This is true not only of the instruction process but also within the activity concerned with the life and operations of the whole school. Besides this method lectures are very often used. This method is used a great deal in dialogue form, however, and is characteristic of the teaching in classes and for the contemporary-orientation subjects.

The independent individual work is an important part of the acquiring of knowledge and skills. It is a characteristic working form at the Experimental Gymnasium. The school depends to a high degree on this way of working, which also has the characteristics of private study. Here in many cases the teacher will act as guidance counsellor for the individual pupil. In this context the school depends on a type of "subject workshop", where the pupils can make use of various teaching aids when they need them.

In studying the working methods at the Experimental Gymnasium one must also consider the importance attached to written work in the teaching. Group projects are often concluded with a written piece of work, and the teachers themselves must make reports on their activities at the end of each semester. The typewriter and the mimeograph machine are thus constant teaching aids. These are also used to a great extent when the teachers and pupils in cooperation work on their study material. There is an increasing tendency at the school to produce its own study materials. Textbooks are thus becoming of less importance. This situation is not as true for the mathematical/natural science subjects, however, where the extent and requirements of the curriculum are fairly great.

For instruction in electronic data processing the school uses its own data terminal connected to a data machine. In language instruction a language laboratory located in the vicinity is rented.

During instruction in the classrooms the pupils never sit in rows. The desks are re-grouped in the shape of a horseshoe, for example, or they are made into a long table or put in small groups. It will also be found that the teacher's desk is conspicuous by its absence in the classrooms of the Experimental Gymnasium.

The teachers at the Experimental Gymnasium have a role that is very much related to the role assigned to a counsellor or adviser. Because of this the evaluation of the instruction and achievements also are given another status than would ordinarily be found in the traditional school. In private talks between teacher and pupil the pupil can have his study results evaluated. There is a desire that the evaluation be directed toward the process itself, and to a lesser degree toward the end result. No grades are given in the oral subjects, only in written subjects. When grades are used they are most often given in conjunction with tests administered just before Christmas, Easter and the summer holidays, and particularly prior to the national examinations.

One situation which appears to influence the school's form of evaluation is the private student examination. The teachers at the school are not the ones who will give the final grades on the pupils' achievements in the individual subjects. It is very probable that this type of examination has had a favorable effect on the pupil-teacher relationship. The teacher at the Experimental Gymnasium can thus avoid having to take upon himself the role of "judge".

School democracy in the light of the school's objectives and purpose.

The development of work at the Experimental Gymnasium was described on two fronts in the previous section, Chapter II. 1. This chapter discussed the decision-making bodies at the school and the organization of the educational activities.

An analysis of the innovations that have been implemented at the Experimental Gymnasium must begin with the basic democratic idea of the school. To the school's members the school democracy also appears to be the most important reform work that has been carried out at the school. School democracy, as it is defined by the school's members, demands totality, however, and must include all of the activity represented by this school. The informative organ, "On School Democracy", expresses the fact that the school democracy is not total at the school (2, p. 3). Members of the school have also expressed their belief that the school is not free enough to determine both its objectives and content. This has led to democracy being implemented only in certain areas.

In its terms of reference the Experimental Gymnasium has taken upon itself to operate as a gymnasium. But at the same time it has also taken upon itself the responsibility for those objectives which society has set for such a school. The examen artium requires the school to guide the pupils onward towards a definite goal - or, stated in another way : the members take upon themselves responsibilities for the examen artium. With this responsibility the members of the school have limited possibilities to choose subject and curriculum. In the opinion of many of the members, school democracy at the Experimental Gymnasium is thus restricted.

From the point of view of the Experimental Gymnasium school democracy must include both the decision-making and the learning processes.

It seems, however, that the school has been less successful in making changes that differ to a noticeable degree from what is otherwise usual in the subject and instruction sectors for other schools. There are exceptions, however in two changes that are a direct result of the school-democratic views at the Experimental Gymnasium : the freedom from compulsory attendance and assignments. School democracy as it is practised in the decision-making area is, however, the innovation at the Experimental Gymnasium that is of the greatest significance.

By the reorganization of the decision-making bodies the school believes that it has fulfilled its aim, which is, among other things, to bring the pupils up to become independent, responsible human beings. With the General Session as the school's highest authority, at which pupils and teachers have one vote apiece, and with the Council, composed of pupils and teachers, as the executive authority, the school has built up a structure that is intended to be a means of achieving the major objectives. In this structure the basic idea is also expressed that work done at the school is mainly cooperative activity between the pupils and the teachers and among the pupils themselves. Founded on this idea it then follows that all who work at the school have equal rights and equally great responsibility for what the school is (12, Appendix p. IV).

When the school democracy at the Experimental Gymnasium is seen in relation to school democracy at other gymnasiums it will be found that the concept in the latter case has a far more limited meaning. In the first place there is no General Session as a controlling body and the highest, day-to-day authority. On the contrary, the headmaster and the teachers' councils are the highest authorities at the school. The elected pupils' representatives and the student council function primarily as advisory bodies for the headmaster and teachers' council. The most important difference between other gymnasiums and the Experimental Gymnasium will thus be the fact that the pupils at other gymnasiums do not have the same actual right to help make decisions on their own situation. In other words, the pupils are much less frequently in direct contact with those decisions that are of consequence for themselves.

Chapter IV

MANAGEMENT OF INNOVATION

PATTERNS OF INNOVATIONS

The founding of the Experimental Gymnasium was an innovation that arose from reactions to the established school system. The building up of the school, as to the structure of authority and the organization of educational activities, were and still are innovations that had their origin among the members themselves, however.

Who is responsible for the administration of the development work at the Experimental Gymnasium ? On the basis of the structure of authority at the school it would be natural to assume that the above-mentioned bodies are the responsible leaders of the development activity. However this question must be considered in relation to the aim the school has set for itself : to develop independent people with a feeling of responsibility. In conjunction with this aim the school should be able to say that it is those members who are involved in an innovation who are responsible for the administration of this innovation. In reality one assumes that the administration takes place by an interplay of forces on the part of the individual members and the formally responsible bodies. This opinion is strengthened by the description of the situation given by the school's first leader, among others, that there is a tension created between the individual freedom and the collective responsibility at the school.

As for the responsibility of the individual member for his school and its development, from what has been stated in Chapter II on the views of the students on the school's objectives and goals one will find a range of ideas on the division of responsibility. On the part of some of the members there will undoubtedly be a greater feeling of responsibility for typical innovations than there is among other members. This may be due to the fact that the majority rules at the General Session, and a certain group will thus feel more responsible for the resolution than others will. It may also be due to the fact that the individual members will generally have a better developed feeling of responsibility towards the school than other members have.

In the above paragraphs there has been discussion mainly of the members' responsibility, without differentiating between the teachers and the pupils. This is due, in the first place, to the fact that the school itself wants equality between teacher and pupil in several sectors. In the second place, the opinions on the development activities appear to cut across the dividing lines of teacher and pupil. This means that the teacher as well as the pupil can feel more or less responsibility in conjunction with an innovation.

In the subject and pedagogical sectors, however, it will be expected that generally the teacher's idea of himself as a professional, teacher and counsellor will have a decisive influence on his feeling of responsibility for changes in his field. At the Experimental Gymnasium there are examples showing that this is the case. In particular there is the project for the introduction of electronic data processing into mathematics instruction, the use of drama in teaching, and the expansion of the offers in the aesthetic subject group.

Who expresses the need for changes at the Experimental Gymnasium ? The founding of the Experimental Gymnasium shows in all obviousness that the pupils as well as the teachers joined together on the idea behind the school. The initiative to establish the school did come from students first, however. In today's situation it will be found that the desire for changes cuts across the aligned groups of teachers and pupils as the responsible leadership of the changes does. These needs can also be considered as expressions of or the results of disagreement on the objectives of the school. The various opinions that have made themselves felt here can also throw light on development work in the various sectors of the school ; experiments in various subjects, the integration of the instruction in "bundne" and "personal interests" subjects, the development of information channels between the Council and the General Session, etc. . .

The very special environment at the Experimental Gymnasium, with its emphasis on the social aspect and the development of the individual in the broadest possible way, makes it possible for ideas to be discussed freely in a forum in which respect for the individual is central. It is a not unknown phenomenon at the school that pressure groups can thus develop who present proposals for reforms. The school's first leader believes that this has often been the case. Proposals for changes are made just as often by the individual pupils and teachers as by groups of people, however.

The democratic structure of the Experimental Gymnasium does not mean that all resolutions concerning the internal life and activity of the school must be passed at the General Session. It is the more general guidelines that are drawn up by this body. Every individual class has the opportunity to plan its own form of instruction and work. The changes for the individual class take place mostly in cooperation between the teacher and the pupils. For the first two years this cooperation took place through subject councils established in the various classes. On the first class level, however, this cooperation is complicated by the fact that the teacher must have his teaching plan ready before the school year begins and before the pupils have begun, if the plan is to be approved as an experiment by the Ministry.

The larger projects of change in the academic and pedagogical sectors, such as the "core-subject plan" and the "bundne" subjects and theme-teaching, were prepared by pedagogical groups composed of teachers and pupils at the school. The idea for the "core-subject plan" seems to have a risen from an underlying need among the members. On the initiative of the school leader a working group was appointed that took care of the preparations for the project. The idea of an educational group was also used in forming the plans for 1970/71.

A general impression of the procedure followed in the preparation of innovations is the school's tendency to make use of groups like these. This is true in most of the cases that need preparation and thorough discussion. On the "administrative" level it should be mentioned that an "admissions group" has been established - a new group each year - which takes care of the admission of pupils. The school also has a "budget group", an information group, etc. It should be noted that the groups are always established by the Everyman's Meeting.

Development activity at the Experimental Gymnasium is to a high degree marked by the internal activity in the school, by the needs and desires that are made known among the members. The changes that have taken place seem to be marked by initiative from within the school and to very little extent because of direct influence from the outside. The fact cannot be completely disregarded, however, that there has been an indirect influence by ideas such as those on which a school like "Summerhill" and the "Bernadotte School" are founded.

Management of changes in the decision-making sector

Development activities at the Experimental Gymnasium are considered by its members to be a natural part of the school. In the description of the school's objectives and purpose in Chapter II it was also obvious that several of the school's former and present members agreed that the school must be in a state of continual development. On the basis of the democratic thinking at the school this also seems to be a necessary consequence. Freedom for the individual, the programme on the development of independence and the feeling of responsibility, and the fact that the school is a gymnasium with a major purpose, are situations that can lead to development. But it must be emphasized that the direction for the development is not determined by this fact. The principle of a constant reforming does not presuppose anything as to the development leading to something better or worse for the school as a whole or for the individual. It is the developmental process itself, in each individual case, that appears to be important for the school. But this does not say everything on the subject: The process must be started and maintained. To this end stimuli must be brought in that ensure the maintenance of the process.

Such stimuli appear very definitely to be present at the Experimental Gymnasium. For every new school year pupils are accepted who come from other schools, either from the compulsory youth school, the lower secondary schools (realskoler), or the gymnasium. The motivation for attending the Experimental Gymnasium differs from person to person. But it has been pointed out earlier that reactions to the school the members have attended previously appear to be one of the main motives for attending the Experimental Gymnasium. This motivation can also be described as a form of "negative" motivation, which takes the form of an inner tension in the individual.

The school itself seems to have defined the reasons for this tension in the individual. Words such as "authority", "fellow-human feelings", "trust" and "freedom" are used among others as explanatory factors - with the meaning that the pupils have previously experienced the words in a negative way, for example as distrust and non-freedom. This also offers a key to an understanding of the development activity that has taken place at the Experimental Gymnasium.

The word "trust" has a central position in the division of authority and responsibility at the Experimental Gymnasium, and within that innovation which may be considered to be the most significant factor at the school - the process of decision-making in school democracy. The relationship between the Council and the General Session has been built up by a development of mutual trust. Fairly early a tense situation developed between these two bodies, based on a form of "distrust" on the part of some of the members because of the fact that the Council was seizing more power than it had the authority to use. With this, one of the most central problems in the school was affected - the right of the individual to make decisions. The innovation had thus entered a critical phase which forced the rule into being that the Council meetings were to be open meetings for everyone except when individuals were discussed. It also led to the agenda for these meetings being posted prior to the meeting. Still another source of tension between the Council and the General Session in this beginning period was the election of pupils to the Council. A great deal of expectancy had been attached to the job of being a representative of the pupils on the Council, but the moment the pupils themselves took a seat on the Council there was disappointment at how little the Council actually had to say. Gradually, as the members have gained experience in the division of power between the Council and the General Session,this tense situation has been reduced. One of the reasons for the reduction in tension may be the establishment of an internal information paper at the school whose task it is to give information on matters that have been taken up by the Council and matters that are to come up at the General Session.

The involvement of the individual members at the General Session has been a source of development of new information media in relation to this meeting. There are groups of students who very seldom speak up at the General Session, pupils who appear to be passive and uninvolved. At an early point a need was felt for other forms for the involvement of these pupils in relation to the Everyman's Meeting. The school has tried to activate these pupils by the establishing of sub-groups or preparation groups for the General Session. The idea behind this innovation was that the individual pupil would feel a greater security in a smaller group and that this would lead to greater involvement and better preparation for the matters to be taken up by the General Session.

The function of the school leader in the changes in the decision-making area seems to become most noticeable when it is a matter of delegating tasks to other members of the school. The school leaders have considered this to be their duty. By this the chances for the individual members to come into contact with the decisions are much increased. But with this it is very probable that some of the tension in the relationship with the leader has been reduced. The role of the leader in the carrying forward of the school's main innovation appears, in this delegation of tasks, to have had a positive effect to the degree that unnecessary conflicts have not arisen. In this connection it must be emphasized that the leader has no decisive power at the school. According to the by-laws for the school the leader is responsible for the daily administration of the school according to guidelines from the General Session and the Council. The tension in the relationship with the leader has very proabably arisen in the conflict between the traditional role of headmaster and the new leader-role.

Developmental work at the Experimental Gymnasium is engaged in by members who voluntarily devote their efforts to the activity. The principle that the school is to be operated in cooperation between teacher and pupil means that the development process keeps in step with the will and ability to cooperate between the involved parties at the school. The actual right of the pupils to help determine the changes can only be completely exploited when they are willing to take on responsibility for the changes. Freedom for the individual pupil to take responsibility thus limits the possibilities for the school to prove its collective functional ability. The goodwill of the teacher in introducing innovations in the subject, educational and social areas is not enough to enable the school to produce successful innovations. The will of the pupils to make changes for themselves and the school is also decisive for this.

In a "historical light" it is apparent that the mutual trust between the authoritative bodies at the school has gone through a development process that has had a retroactive force on the innovation in the whole of the decision-making area of the school. Bodies that were established during the earliest period of the Experimental Gymnasium have retained their functions, experience having proved that they were capable of survival.

The processes of innovation at the school must be understood on the basis of a fundamental idea of the school : That the pupils have the freedom to decide what they themselves want to do. This is a challenge that is equally hard for all new pupils who come to the school. For some of the pupils the results of the challenge are fortunate, for others, the challenge is too much. The patterns of innovation and the administration of innovations at the Experimental Gymnasium are difficult to understand if this situation is not taken into consideration.

Chapter V

EFFECTS OF THE CHANGES

THE SCHOOL MILIEU

The foregoing chapters are intended to illustrate the social framework in which the school exists and the tasks it wants to carry out within this framework.

It should also be apparent from these chapters that the Experimental Gymnasium is intended to be something other than the ordinary gymnasium that exists within the public school sector. The environment at the school, interpreted both as regards the social and the teaching environments, has been formed with this objective in view.

The role of the school leader of the Experimental Gymnasium is not the same, for example. The right of the individual to participate in making decisions at the Experimental Gymnasium has necessarily led to this function of leader being redefined. The previous description of the structure of authority and the process of making decisions at the Experimental Gymnasium allows an insight into this new conception of the leader's role.

The innovations at the Experimental Gymnasium have also led to a radical change in the working climate of the school itself. To a high degree this is the result of the fact that teachers and pupils are considered as equally valuable members of the school with the same rights. The teacher does not have his position in this gymnasium on the basis of his authority as "teacher". The constant conflicts and tense situations in this area have shown that the traditional role of teacher is not accepted by the members. However it seems, from the viewpoint of an observer, as though the members have difficulties in differentiating between a so-called authoritarian teacher's attitude and an attitude based on a natural authority. With this it also appears that the school has had problems in being allowed to let the experiences of the teachers benefit the development of the school.

The pupils' views and the teachers' views too on the role of the teacher must be newly established for every new member who comes to the school. The environmental situation of the school is, however, an attitude-changing factor.

Even so, it has been shown at the Experimental Gymnasium that it takes time to alter opinions.

Besides the problems in conjunction with "the leadership of instruction" which is implicit in the conflict between the teachers' and the students' ideas of roles, the freedom from compulsory attendance is one of the school's most difficult innovations. On the basis of a traditional teaching view this practice has complicated the whole organization of the instruction. Support for the teaching also seems to have been and still remains a problem for the school. Ideally this freedom of attendance at the school is based on an agreement that the pupils are to give notice if they want to listen to the instruction or not. For some of the pupils this freedom has led to irregular attendance in class.

There have also been problems in getting the pupils to come to class on time (2, p. 4). It must be emphasized, however, that the school does not consider it as any goal to have as many pupils as possible collected at work in classes or in groups. From the earlier description of objectives and purpose of the school and its forms for working with the subjects, it is apparent that the development of independent habits of work is encouraged and is a goal in itself. But as has also been pointed out earlier : Freedom is a challenge that some accept better than others do. Again this is one of the core problems for the school : How far does individual freedom go in relation to the collective responsibility ?

Insight into how the pupils themselves regard the environment of the school and the changes and activities that are characteristic for the Experimental Gymnasium can be obtained by studying the answers to the questions asked the pupils in this field. In Chapter II. 2. 3. a more detailed explanation has been given of a study made among the pupils at the school in February/March 1971. Here reference will be made only to the answers to those questions that normally belong to Chapter V, and with the reservation that those limitations are valid for the study that were mentioned in Chapter II. 2. 3. Here it was emphasized that the survey material cannot be considered as fully representative of the pupils at the Experimental Gymnasium. This is especially true for the 2nd and 3rd class levels, as well as for all of the boys.

In Question 7 an effort was made to chart the pupils' evaluation of the social environment at the school. The question read :

Question 7 : Are you satisfied with the way in which pupils and teachers associate with each other at school every day ?

The distribution of answers in the limited answer choices for this question are shown in Table 9 for those 78 pupils who answered the questionnaire. It appears that there is only a small percentage, 3. 8 %, who are "poorly" satisfied with the manner in which teachers and pupils associate.

Table 9 : DISTRIBUTION BY PERCENTAGES OF PUPILS' ANSWERS TO QUESTION 8, ACCORDING TO GIVEN ANSWER CHOICES.

Not answered + non-classifiable %	Very well satisfied %	Well satisfied %	Fairly satisfied %	Poorly satisfied %	Total number N
10. 2	42. 3	29. 5	14. 1	3. 8	78

The majority of the pupils (71. 8 %) are "very well" or "well" satisfied. About half of the pupils have given written statements on the question, and some of them believe that there is a natural social exchange between teachers and pupils at the school, while others express the fact that they have contact-problems with the members of the school. A typical statement was made in this way : "I didn't know that teachers were people before I came to the Experimental Gymnasium."

In Question 10 the teachers' attitude to the individual pupil was discussed in a general way. The answers were intended to supplement the answers to Question 7.

Question 10 : Are you satisfied with the way the teachers consider your opinions and desires at the school ?

The answers to the set answer choices showed that the pupils to a high degree are very satisfied with the manner in which the teachers give consideration to the opinions and wants of the individual. As many as 79. 5 % said that they were "very well" or "well" satisfied. 7. 7 % said that they were fairly satisfied while 2. 6 % were poorly satisfied. No answer at all was given by 10. 3% In the free commentaries in the answers made by 25 students, some claimed that the question was irrelevant for the situation at the Experimental Gymnasium. They justify this by saying that the teachers do not have any more authority than they themselves have. It is also claimed that the teachers, like all other members of the school, are not supposed to give consideration to the opinions and desires of the individual. One of the pupils said that the pupils, at any rate, have the right to criticize both the teacher and his instruction if they want to do so.

In comparing the answers to Questions 7 and 10 it will be found that only a very few are dissatisfied with the purely human relationship between teachers and pupils at the school. The fact that Question 10, whether the teachers pay attention to the students' opinions, was felt to be irrelevant by some of the pupils, may be confirmation that the school has been successful in its efforts to achieve the desired change in the relationship between teachers and pupils.

Besides the purely interhuman-relations aspect in the school's environment, the aspects of non-compulsory attendance and democracy at the school were touched on in the questionnaire. The question of the pupils' views on freedom from compulsory attendance was given in a free answer form and read:

Question 16 : What is your opinion on non-compulsory attendance for classes and group-work ?

The usual theme in the 73 answers to this question was that freedom from compulsory attendance is necessary and decisive for the school, if it wants to be a democratic school. It was claimed by several pupils that this freedom forces the students to think for themselves. The members often touched on the concept of responsibility, however. It was maintained that many pupils feel too little responsibility and should learn to consider other people. Many of the students believe that this in turn leads to problems both for the school and the individual member. Some of the pupils said that people are too irresponsible when it is a matter of coming at the right time, and that it is much too easy to drop behind in their studies because it is so easy just to skip classes, among other reasons. Several also mentioned that the non-compulsory attendance has had unfortunate effects on various types of group work and group instruction. Some of the students believed that the non-compulsory attendance should be based on the agreement principle to a far greater degree than it is now.

What was the pupils' opinion of democracy at the school ? This concept in this connection was intended to include the non-compulsory attendance as well as what has been mentioned on the right to help make decisions. It is intended to be an all-inclusive term for the activities at the school.

Question 24 : Are you satisfied with school democracy as it functions at the Experimental Gymnasium ?

Table 10 : DISTRIBUTION BY PERCENTAGES OF PUPILS' ANSWERS TO QUESTION 24, ACCORDING TO GIVEN QUESTION CHOICES :

Not answered + non classifiable %	Very well satisfied %	Well satisfied %	Fairly satisfied %	Poorly satisfied %	Total number N
19. 2	15. 4	35. 9	15. 4	14. 1	78

From the distribution of answers to this question Table 10 shows that there is a fairly large range in the pupils' views on school democracy at the Experimental Gymnasium. More than half of the pupils, 51. 3 %, answer that they are "very well" or "well" satisfied, while 15. 4 % are "fairly" satisfied, and 14. 1 % are "poorly" satisfied. In addition there was a comparatively large group that had not checked any of the choices.

If the answer distribution for this question is compared with the distributions quoted for other questions, it will be seen that there are now comparatively more students who have checked the alternatives "fairly" or "poorly" satisfied. There are also fewer pupils who have checked the more positive choices.

In analyzing the answer distribution to Question 24 by the different class levels and sex, there are very marked differences in the answer patterns between the different class levels and between boys and girls. The pupils at the 2nd class level are, on the average, more satisfied with school democracy than the pupils at the 1st and 3rd levels are. In percentages the pupils at the 3rd class level are the least satisfied. But it must be emphasised here that the sample of pupils at the 3rd class level cannot be considered as representative of the pupils at this level. This thereby limits the generalizations and the results must remain an expression of the opinions of those 16 3rd-year students who turned in their answers.

As for the difference between the girls and the boys, the boys seem on the average to be more satisfied with school democracy than the girls. In addition there were more girls than boys who did not answer the question.

A more complete picture of the pupils' views on school democracy can be obtained by studying the freely written statements (32 in all). In these too both positive and negative evaluations appear. It is said that there is nothing wrong with the system practised at the Experimental Gymnasium. It can stand as an example for other schools, but it is admitted that there are problems. Several of the students believe that examen artium and the curriculum are obstacles to school democracy. It was also said that the pupils are too passive, that the school has a tendency to "divert them from their purpose". Some of the pupils expressed an unenthusiastic attitude towards the school democracy at the Experimental Gymnasium.

As was seen in Questions 16 and 24, concerning the non-compulsory attendance and school democracy, there are divided opinions on these situations at the Experimental Gymnasium. The changes which the school has put into operation appear to have had highly different effects on the pupils. The returned answers seem to point this out.

What effect has the Experimental Gymnasium had on the individual pupil and his development ? A question like this should cast even more light on the environment at the school and the school's method of realizing its objectives. Question 25 discussed this situation :

Question 25 : What significance do you think that the Experimental Gymnasium has had for you and your own development ?

The question was answered by 69 of the 78 pupils who returned complete answers. The opinions that were expressed here were again very divided - to a comparatively large group of students it appears that the Experimental Gymnasium has been of great significance in the development of their independence. Several bring out the fact that the school has taught them to think in a freer manner. Others emphasize the positive interhuman situation at the school, and that this has helped to solve purely personal problems.

There are few who claim that the school has been of any significance for them in the subject and learning sectors. There are also several pupils who think that the school has not meant anything to them at all. Others believe that they have become lazy and somewhat careless at the school.

The changes that have been made at the Experimental Gymnasium, seen in relation to other gymnasiums and as the pupils see them, appear to have different effects on the pupils. This must be considered as normal, but the transition and readjustment to the Experimental Gymnasium seems, according to the available material, to be a challenge which not all the pupils have managed to accept equally successfully.

DEVELOPMENT ACTIVITY

In the pupil-study that was made in February/March 1971 at the Experi-

mental Gymnasium information was also obtained on the pupils' opinions of the teaching conditions and the process of making decisions at the school. Together with the pupils' viewpoints on conditions in the social environmental situation of the school, which were discussed in the previous chapter (V. 1), this information should offer a more thorough understanding of the effects of the innovation activity on the students at the Experimental Gymnasium.
The students' answers to four questions concerning the cooperation between teacher-pupil and pupil-pupil have been set up with a distribution by percentages in Table 11.

Percentages of the total number of 78 complete returns (refer to Chapter II. 3) have been calculated.

Table 11 : DISTRIBUTION BY PERCENTAGES OF PUPILS' ANSWERS TO QUESTIONS 8, 11, 13 and 15, ACCORDING TO SET ANSWER CHOICES.

Question n°	Are you satisfied with :	Not answered + non classifiable %	Very satisfied %	Well satisfied %	Fairly satisfied %	Poorly satisfied %
8	the help you receive from the teachers for subjects and studies at school ?	10. 3	30. 8	21. 8	34. 6	2. 6
11	the help you receive from fellow-students for subjects at school ?	15. 3	25. 6	25. 6	25. 6	7. 7
13	the way teachers and pupils cooperate on instruction questions ?	12. 9	25. 6	34. 6	20. 5	6. 4
15	the openness with which problems in instruction are discussed between teachers and pupils ?	11. 6	41. 0	34. 6	10. 3	2. 6

From the answers to the questions it appears that there is a comparatively small percentage who are "poorly" satisfied with the cooperation between the members in the instructional area. The pupils are, however, on the average more satisfied with the openness with which problems in instruction are discussed than with the guidance the pupils receive from the teachers involved. The statistics in Table 11 otherwise show that there is a relatively wide range in the pupils' views on the cooperation in instruction. They are also satisfied in general with this cooperation. The free answers in conjunction with the questions in Table 11 do not give any further information on cooperation among the members of the school.

Where mutual cooperation among the teachers is concerned there is very little available information. In the information organ, "On School Democracy", however, it was said that it has been difficult, up to the present, to achieve any stable form for cooperation among the teachers. This is explained by the fact that the teachers have not had either the excess time or the energy for any such activity (2, p. 9). The school has tried, however, to strengthen the cooperation between the teachers by letting them take a group dynamics course (a course following the plan of the Danish psychologist Arne Sjølund).

An effort was made to obtain information on the pupils' opinions of the school's subject offers, their schedule and the school building, by using three questions. The answers to these questions have been set up in Table 12.

Table 12 : DISTRIBUTION BY PERCENTAGES OF PUPILS' ANSWERS TO QUESTIONS 9, 12 and 23, ACCORDING TO SET ANSWER CHOICES.

Question n°	Are you satisfied with :	Not answered + non classifiable %	Very satisfied %	Well satisfied %	Fairly satisfied %	Poorly satisfied %
9	the choice of subjects offered by the school ?	6. 4	41. 0	32. 1	16. 7	3. 8
12	the schedule you have at school ?	14. 1	9. 0	32. 1	29. 5	15. 4
23	the premises the school is allowed to use ?	10. 3	23. 1	24. 6	15. 4	16. 7

According to Table 12 it appears that most of the pupils at the gymnasium are satisfied with the subject offers of the school. In the freely written answers it was also revealed that several of the pupils are dissatisfied with the fact that the offers are so strictly limited by the curriculum and examen artium. Several pupils also expressed their enthusiasm for the "theme" plan with which the school has experimented.

The pupils at the school are, on the average, "fairly" satisfied with their schedules. However a relatively large group of pupils, 15.4 %, are "poorly" satisfied. Only 9.0 % of the pupils are "very well" satisfied. The free answers to the question reinforce this tendency in the answer-distribution.

Concerning the school's premises, 16.7 % or the pupils are "poorly" satisfied, 23.1 % are "very well" satisfied. A couple of the free answers indicate that the rooms are "horrible", but it is claimed by many of the pupils that here they have the possibilities for "making" their own school.

The most important innovation by far at the Experimental Gymnasium is, as has been mentioned previously, the changes made in the decision-making sector. The pupils were also asked questions concerning this situation. In Table 13 the answers have been set up for Questions 20, 21, 18, 19 and 22.

Table 13 : DISTRIBUTION IN PERCENTAGES OF PUPILS' ANSWERS TO QUESTIONS 20, 21, 18, 19 and 22, ACCORDING TO SET ANSWER CHOICES.

Question n°	Are you satisfied with :	Not answered + non classifiable %	Very satisfied %	Well satisfied %	Fairly satisfied %	Poorly satisfied %
20	the possibilities you have to exert influence on the matters taken up in the Council ?	11.6	16.7	50.0	11.5	10.3
21	the possibilities you have to exert influence on the decisions made at the General Session	14.1	31.8	37.2	19.2	7.7
18	with the information you receive on decisions made at school ?	14.1	25.6	33.3	17.9	9.0
19	the way the administration functions in everyday life ?	15.3	29.5	34.6	16.7	3.8
22	the way the school uses its money ?	28.2	23.1	42.3	3.8	2.6

The pupils at the school were, on the average "well" satisfied with the decision-making process at the school as it was expressed in the questions in Table 13. However, there was a comparatively wide range in the satisfaction of the pupils with the possibilities of exerting influence on those matters taken up by the Council and on the decisions made at the General Session. For Question 20 there were 10.3 % who were "poorly" satisfied and 16.7 % who were "very well" satisfied. In analyzing the answers from the different class levels more closely, however, it proved that the 1st year students are those least satisfied with the possibilities of exerting influence on matters taken up by the Council. This marked difference between the class levels is not found in Question 21. The evaluation of the possibilities for exerting influence on the decisions made by the General Session appears to have an even distribution at all three class levels. The freely expressed answers to Questions 20 and 21 offer no further information in this respect.

In answer to Question 18 on the information which the pupils are given on decisions made in the school the same tendency is found as for Question 20. The pupils in the 1st year class are markedly less satisfied with the information than either the 2nd or 3rd class levels. The group of pupils, 9 %, who are "poorly" satisfied, consists mostly of pupils at the 1st class level.

Regardless of class level the pupils are generally satisfied with the way in which the "administration" functions in its daily life. This is true also for the evaluation of the manner in which the school allocates its money. There was a large group of students, 28.2 %, who had no opinion on this question.

The pupils' answers to the questions concerning the teaching conditions and the decision-making process at the school show that the pupils, on the average, are generally satisfied with the manner in which the innovations function. But the fact cannot be concealed that there are divided opinions among the students included in the survey material on those conditions taken up in the questions. If the answers to the questions quoted in this chapter are considered in relation to the answers to the questions in the previous chapter, however, the conclusion could be drawn that the pupils experience the greatest difficulties in conjunction with the educational activities at the Experimental Gymnasium. This is not the case for the cooperation in instruction but for the problems in connection with freedom and responsibility. The attitude towards the right to participate in making decisions seems to be more clearly defined and acted upon among the pupils than their relationship to the processes of education. Their attitude toward the curriculum and the examen artium cannot cover up the fact that there is a group of pupils at the school who, on the whole, have problems in an educational context.

PUBLICATIONS AND DISSEMINATION TO OTHER SCHOOLS

During its period of existence the Experimental Gymnasium in Oslo has managed to establish itself as an institution. Because of this the school has also been allowed time and opportunity to try out its ideas. To some degree this establishing as an institution must be ascribed to the fact that the school has received the necessary financial support from the city of Oslo. Along with the enthusiasm and the courage to push forward which has characterized the driving forces behind the school this has now led to the school's gradually having entered a more peaceful phase, which is marked by development activity on the internal level. What has been presented in the aforegoing chapters on the development activity at the school supports this theory, since the school has placed great emphasis during the last two years on the building up of a satisfactory standard of instruction for its members.

Where the school and the effect it has had on the rest of the school system is concerned, it is difficult to make any statement. The demand for a democratizing of the school appears to run parallel with increasing demands for democracy on the work-sites in the rest of society, also. What effect the Experimental Gymnasium has had on the formulation of the cooperative forms within the public school sector is impossible to say. But it must be permissible to state that the school has had an effect on the debate that went on and that is still raging about democracy in the school. This was revealed most clearly perhaps during the period of the founding of the school and during the school's first year of existence. During this time the Experimental Gymnasium placed great emphasis on spreading information about the school and its fundamental ideas to other activities. The school sent lecturers to other schools, political parties and various organizations. When compared with the first year of the school's existence this activity appears to have been reduced in recent years. The Experimental Gymnasium itself is constantly visited by school professionals and students, both from here in Norway and abroad (2, p. 1).

The Experimental Gymnasium publishes its own information paper "On School Democracy" (2), which is sent to the editorial offices of school newspapers all over the country, to student councils in the gymnasiums and to the representatives of The Association of Secondary School Teachers in Norway. This organ reports on the activities of the Experimental Gymnasium and is intended to offer a basis for debate on school democracy.

In this connection it should be mentioned that a parallel experiment to the Experimental Gymnasium in Oslo was set up at the experimental gymnasium in Gothenborg, Sweden, at a fairly early date. An experimental gymnasium was also started in Bærum, one of Oslo's neighbouring communities, in 1969. Denmark has also founded its experimental gymnasium, which has sprung from the same school-democratic ideas that are the basis for the schools in Oslo, Gothenborg and Bærum. This gymnasium started in 1970 and is located in the community of Gladsaxe, just outside Copenhagen. The Experimental Gymnasium in Oslo has apparently influenced the development of all three of these experimental gymnasiums.

The Institute for Social Research at the University of Oslo and the Department for School Research and Experimentation of the School Administration for the City of Oslo have been given the job of observing the development activity at the Experimental Gymnasium in Oslo. A research team from the former institute has observed the activity at the gymnasium. Up to the present this has resulted in two dissertations on the school. Reference has been made to these in the preceding chapters. The titles of these works are "Experiences from the Experimental Gymnasium in Oslo", Oslo 1970 (5), and "The Experimental Gymnasium, an Analysis of the Objectives and an Effort to Make an Evaluation", Oslo 1970 (3).

For its part the Department for School Research and Experimentation has made a provisional report on "The Experimental Gymnasium During the School-year 1967-68". (12).

Together, the above-mentioned institutions have tried to present a picture and an evaluation of the work that has been carried out at the Experimental Gymnasium. No other form of systematic evaluation of the school has hitherto been made.

CONCLUDING REMARKS

In Chapters I and II of this report an effort has been made to form a basis for the understanding of those ideas on which the Experimental Gymnasium in Oslo is founded. An important characteristic of these ideas are the ideas of school democracy. Through its operations the Experimental Gymnasium has attempted to realize these ideas by allowing the pupils and teachers the same right to make decisions in all of the school spheres. The principle of the right to participate in decision-making appears to stand as both objective and means for the members of the Experimental Gymnasium as a group. The gymnasium that is established will, by virtue of this, necessarily be different in many ways from the traditional gymnasium.

The principle of participation in making decisions has put its mark on the innovations and the development work that has been carried out at the Experimental Gymnasium. This activity is discussed in Chapters III and IV. The innovation area that appears to have achieved the greatest reverberations both within and outside of the Experimental Gymnasium, and which now has the most noticeable dissimilarities in relation to other gymnasiums, is centred in the decision-making process and the bodies which this has formed at the school. On the whole, the complete process of making decisions at the school must be regarded as an important part of this innovation.

The aim of the present study has been to describe innovations that make themselves felt at an experimental school. One of the main purposes of this description has also been to explain how the administration of this innovation process has been carried out. In this context it has also been natural to describe how the internal social system of the school interacts with the innovation processes, and how the relationship to the school's external, surrounding environment may have affected these processes.

In describing the effects of the changes that have been made at the Experimental Gymnasium, compared to other schools, emphasis has been placed on effects on the school's environmental situation, seen with the eyes of the pupils. For the people who took the initiative in the founding of the school it appears to have been important to allow the innovations to affect the interhuman relations at the Experimental Gymnasium. The effect on the performance level for the pupils appears therefore to be somewhat outside the framework of the present report. A comparison of the performances of pupils at the Experimental Gymnasium and at other gymnasiums in Oslo has not been included, for this reason.

The effects of the innovations at the Experimental Gymnasium have been clarified mainly with the help of statements from pupils who attend the school at present. It must be emphasized that those statements quoted in Chapters II and V cannot be regarded as being completely representative of the general opinions among the pupils at the Experimental Gymnasium. However, they help to present a picture of the divided and dissimilar opinions which the pupils have about the Experimental Gymnasium.

The members of the Experimental Gymnasium themselves look on their school as a gymnasium. In this, however, there appears to be a source of constant conflict at the school. On the one hand the school has taken on the responsibility of guiding its pupils towards the examen artium, the final examinations for this type of school. On the other hand the school wants to allow its pupils to develop in freedom. The examen artium and the accompanying requirements as to curricula for the various subjects is considered by many to be an obstacle to the latter objective (refer Chap. II and see above).

It is apparent that the Experimental Gymnasium represents a challenge to each of its members. The freedom to decide what one wants to do by one's self, what to read and what instruction to listen to is a challenge that not all of the pupils manage to accept to an equal degree. A number of the school's main problems appear to be connected with the different views among the members as to how structured the teaching offer should be, how much the individual pupils should be led and to what degree the teachers should use the professional and pedagogical authority that is a natural result of their teacher's training and position. It appears that it is in connection with the instruction plan itself that the members experience the greatest difficulties. The relationship to the process of making decisions and the right to help make them appear to be more clearly defined and acted upon by the pupils than is their relationship to the processes of instruction (refer Chap. V, Section 2.)

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Appendix 1

BY-LAWS FOR THE EXPERIMENTAL GYMNASIUM IN OSLO

1. Through experimental activity of an educational, subject and organizational nature the Experimental Cymnasium in Oslo will gather experience which can aid in changing the form of the present gymnasium. This gymnasium is also to be an alternative to today's gymnasium. The school will be founded on school democracy in order to create the basis for the growth and development of the pupils in the broadest possible way.

2. The school leader is responsible for the school's daily administration according to guidelines from the General Session, and the Council, and is the school's responsible representative in negotiations with the authorities.

3. The Council is the executive authority of the school. It is composed of four pupils elected by the pupils, three teachers elected by the school's teachers, the school leader and one representative of the parents of the pupils. The Council is elected for six months at a time and chooses its own chairman and secretary. The Council has a quorum when six of its members are present.
a) The Council makes recommendations on the matters to be taken up at the General Session and always on pedagogical and subject matters, new experiments and new subjects. If two members want to bring up a matter, this does not go through the Council but is taken up directly at the General Session.
b) The Council is also the recommending body for all positions at the school. The Ministry hires the personnel, as is usual for the upper schools, but cannot employ any teacher not approved by the Council. These appointments are made for specified periods only. The Council is responsible for the admission of new pupils.
c) If a member does not function well scholastically and socially, and does not show any signs of improvement after he has been talked to, the person in question cannot demand to be a member of the school during the following semester. The member has the right to be present at all conferences concerning himself. The Council is the responsible body in such decisions.

d) The agenda should be made public prior to every meeting. Resolutions are passed with a simple majority and are to be made public following each meeting. In general the meetings are open to the members of the school. The resolutions passed by the Council can be taken up at the General Session if two of the members demand this.

4. The General Session is the school's deciding body and is to take up questions concerning the principle guidelines of the school and the members' welfare.

a) The General Session is composed of all members of the school and is led by a board of five members who are elected for each semester. The board is to have one teacher member.

b) The board has one permanent representative without the right to vote, on the Council.

c) The board arranges and leads the General Sessions and prepares all matters to be discussed. The agenda and proposals for resolutions are to be made public by posting for two complete school days.

d) Written votes are to be cast if two members of the General Session demand this. Resolutions passed at the General Session require a simple majority. The Council has a one-time postponement veto on decisions made at the General Session.

5. Changes in the by-laws require a 2/3 majority at the General Session, and this resolution must be repeated twice with at least one month's interval in order to be valid.

Appendix 2

QUESTIONNAIRE FOR PUPILS AT THE EXPERIMENTAL GYMNASIUM

Class-level and course : ______________________________

I am a girl ( )
I am a boy ( )

---

1. What do you think the school's objectives and duties should be ?

____

2. In what way do you think that the school can best realize its objectives ?

____

3. Do you agree with the objectives of the school as they are expressed in the by-laws of the school ?

(Check)
Yes ( )
No ( )
Don't know ( )

____

4. Do you think that the school has managed, during its period of existence, to realize the objectives and tasks it set for itself ?

Yes ( )
No ( )
Don't know ( )

What, in your opinion, is responsible for the school having attained or not having attained its objectives ?

____

5. Do you believe that most people outside of the school understand the purpose of the school ?

Yes ( )
No ( )
Don't know ( )

____

6. Have you the impression that the aims of the school have changed during the time it has existed ?

Yes ( )
No ( )
Don't know ( )

If so, in what way ? : ______________________________

7. Are you satisfied with the way in which pupils and teachers associate with each other at school everyday ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

____

8. Are you satisfied with the help you receive from the teachers for subjects and studies at school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

____

9. Are you satisfied with the choice of subjects offered by the school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

____

10. Are you satisfied with the way the teachers consider your opinions and desires at the school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

____

11. Are you satisfied with the help you receive from fellow-students for purely scholastic problems ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

12. Are you satisfied with the schedule you have at school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

13. Are you satisfied with the way teachers and pupils cooperate on instruction questions ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

14. Are you satisfied with the interest which your parents have shown in the school and its work ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

15. Are you satisfied with the openness with which problems in instruction are discussed between teachers and pupils ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

16. What is your opinion on non-compulsory attendance for classes and group-work ?

17. Are you satisfied with the interest which the State Council on Secondary Education and the Ministry for Church and Education have shown in the school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

18. Are you satisfied with the information you receive on decisions made at school ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

19. Are you satisfied with the way the administration functions in everyday life ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

20. Are you satisfied with the possibilities you have to exert influence on the matters taken up in the Council ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

21. Are you satisfied with the possibilities you have to exert influence on the decisions made at the General Sessions ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

---

22. Are you satisfied with the way the school uses its money ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

23. Are you satisfied with the premises the school is allowed to use ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

24. Are you satisfied with school democracy as it functions at the Experimental Gymnasium ?

Very Satisfied ( )
Well " ( )
Fairly " ( )
Poorly " ( )

25. What significance do you think that the Experimental Gymnasium has had for you and your own development ?

Part Three

THORNLEA SCHOOL, ONTARIO, CANADA

by

Michael Fullan, Glenn Eastabrooke, Dan Spinner and Jan Loubser

The Ontario Institute for Studies in Education

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PREFACE

This study, done under the pressure of time, depended on an extraordinary amount of cooperation from a number of people for its completion. The enthusiasm and insightful reflections on the part of people at Thornlea made this task possible, and in a real sense indicates the kind of motives and abilities that are behind the school's capacity to innovate.

The Principal of Thornlea, Art Murch, and the Director of Instructional Services, Jerry Diakiw, deserve a special thanks for spending countless hours with us from an already demanding schedule. We also thank them for their helpful comments on an earlier draft of this report. This study would not have been possible without their extraordinary support.

The frankness with which teachers told us their personal feelings and perceptions of the school was an invaluable source of insights into the day to day operations of the school. We thank them all for their genuine contribution to this study.

The parents and students whom we interviewed again reminded us of the ease at which people connected with Thornlea talk about their school, its successes and failures.

The York County Board of Education, the Director of Education, Mr. Sam Chapman and his administration reflect another aspect of the openness in that school system in their willingness and desire to participate in this project.

This study also benefited greatly from the working papers developed by the central CERI staff in Paris. The seminar held in Norway in January 1971 was particularly helpful in designing the structure of this report.

Finally, we are grateful to our colleagues Peggy Hewson, Carolyn Moody and Herb Spiers in the Department of Sociology and in the companion project on York County Board of Education who participated in the design of this study and contributed in various ways directly and indirectly during the course of carrying it out.

INTRODUCTION

This report is one of a series of case studies at the local, regional and national level of various educational systems around the world. This study of Thornlea Secondary School is done in conjunction with another report on the school's regional authority, York County Board of Education. These in turn are complemented by a study of the Ontario Institute for Studies in Education. All of these efforts in Canada, and in other countries, focus on the process of deliberate change within an educational institution.

Canadian education has been, historically and traditionally, more conservative than that of its neighbours to the south. On the other hand schooling methodologies and structures have rarely been as traditional or conventional as those of the British Isles or many Western European countries.

In recent years, Canadian education has been characterized by serious attempts to improve the quality of education as several provincial commissions on education testify. There has also been an increase in innovation and experimentation with new ideas. Thornlea is known throughout much of Canada as an innovative school attempting to combine the best of past educational practices and experiments.

Not unexpectedly, Thornlea is located close to one of Canada's major urban centres. Although it would be impossible to compute exactly the benefit of such an urban environment, it is clear that Thornlea has gained from its proximity to such a large conglomerate of people, ideas and energy. Then, too, the school is located in the richest and most densely populated province of Canada ; the resources available for the school's use exceed those of most schools in smaller urban and non-urban areas across Canada. The specific geographical locale of Thornlea affords it the benefits of one of the fastest growing, most economically viable Boards of Education anywhere in the province.

The conditions then, from a strictly resource point of view, are optimal for innovation. However, it has become evident that the impact of other variables in determining educational innovation must be taken into account. The necessity for a sociological perspective on innovation seems to be particularly great. Thus the internal social relationships within the school itself and the school's relations to outside bodies are the focus of this study.

We should like to emphasize that this study is in the main a descriptive one. Neither the intention nor the methodology of our research was designed for hypothesis testing, statistical measurement or a comprehensive in-depth study. The report is in the best sense of the word an overview. Although over fifty lengthy interviews were conducted, taped and transcribed, with parents, teachers and students, our sampling method was most certainly not random. At our disposal also were the studies of the local Board of Education of the school itself. These were supplemented by interviews with Board personnel and by actual observation at the school. Time, however, was the most limiting factor. A dynamic view of any school structure cannot be captured in a study of three months' duration.

Our observations and suppositions then are largely impressionistic. Our conclusions and recommendations make no pretence to absolute objectivity. Any such report is bound to be open to any number of valid criticisms, alternative perceptions, and strong reactions. It is not the intention of this report to attempt to offend or compliment any individual or group. If indeed the report provokes discussion and evaluation, and in some small way adds to the general body of knowledge and new insights on school innovativeness, we shall be gratified.

A study of a complex school made over a short period of time is inevitably superficial. It is perhaps best to explain our methodology at the outset in order to provide a context in which the reader can interpret our observations.

We gathered data through a series of in-depth interviews, existing research reports and records and our own perceptions and informal discussions at the school.

Our primary source of information was obtained from fifty-three taped interviews that were carried out among teachers, administrators, students and parents from Thornlea. Of these fifty-three interviews some were 'joint' interviews that is husband and wife or two students, etc. Thus, a total of sixty-five persons were actually involved in the interviews.

Formal interviews were supplemented by our attendance at a number of staff meetings, committee meetings and student council meetings. Some time was also spent observing in a number of classrooms.

In a more informal way much of our time was spent sitting in the staff lounge or the cafeteria, chatting casually with staff and students about our work, the school, and education in general.

School files were made readily available to us. In this way we were able to check minutes of past meetings, Board memoranda and the like.

As well, the York County Board's Research Office made available to us interim and final reports of research carried out during the first two years of Thornlea. This material covered such areas as general attitudes, behavioural expectations of each constituency, job satisfaction among Thornlea staff, trustees' goals for Thornlea, etc.

It is important to remember that this is largely a descriptive study with some attempt at a preliminary analysis of the school's structure. As such there is no over-riding conceptual framework, excepting some general outlines mutually agreed upon by the various international participants in Norway during January 1971. Consequently, this study is not an attempt to test any hypothesis about innovative activity, rather it is an attempt to describe Thornlea to the rest of the world and indeed to itself, so that by example, new concepts of the process of innovative schooling and new ideas concerning how innovation takes place may be brought into a comparative light, and thus into the international arena. Our attempt was to compile a general picture of the school's various components while at the same time focusing on a few specific innovations Thornlea provided many examples of innovations from which to choose. The innovations which we selected for study should be seen as illustrations of some of the innovative programmes at Thornlea, not as a complete description. Moreover, in the sense that we focus on innovations as distinct from the total programme of the school, our description cannot be taken as representative of the school's overall activities.

There is no doubt that a more intensive study, perhaps supplemented with a questionnaire survey, would provide a more detailed and more authentic description of the school. However, because we were attempting to look at innovation qualitatively and quantitatively, we feel that the methods we have utilized have some sociological validity.

The interviews were in the main taped sessions of approximately one hour in length. Some were only three-quarters of an hour, others were three hours in duration. Only one family chose not to be taped and this interview was recorded as best as was possible from memory. One teacher interview was not completed, one other teacher chose not to be interviewed at all, and one teacher was available only at times that were not possible for us to accommodate.

Twenty-one out of a total of fifty-one teachers were interviewed. The basis for selection was to include all teachers who were on the major committees (Thornlea Advisory Council and Instructional Policy Committee, see below), plus a random sample of remaining teachers. All members of the management team were interviewed. As well, two administrators from York County Board of Education were included. Twenty students were interviewed, most in single sessions, some in joint interviews with other students or parents. Thirteen interviews with parents were carried out, with twenty parents being involved. In selecting students and parents we attempted to obtain a cross-section of people with different views on the school. In this way we tried to arrive at a composite picture of the school. It should be reiterated though that our sample is not random.

Interviews with teachers usually took place between their classes, in lunch breaks or after school. A few were carried out in teachers' homes or over a meal in a local restaurant. Teachers seemed genuinely interested in contributing to the study. We were continually impressed with the openness and frankness of teachers in expressing their views and feelings about the School. In fact, in many cases we found ourselves in confidence that might not have been shared with other teachers. Both informal talks and taped interviews were used as cross-checks on various points of information. As much as possible taped interviews were kept at an informal level. We carried out interviews using general guidelines to orient people to specific areas of concern-goals and objectives of the school, description of advanced practices, social structure of the school and the patterns of influence and communication by various groups and the impact and evaluation of change. Those interviewed were encouraged to talk freely and pursue any areas of particular interest to them. This approach, combined with occasional probing, served to give a comprehensive view of any one teacher's attitudes and perceptions. To some extent the more change oriented teachers took more initiative and interest in our work, stopping often in the staff room, inviting us to lunch, etc. The impact this might have had on the more conservative teachers is hard to determine ; however, it is a factor to be reckoned with. Our information sources then were probably somewhat biased, as change oriented personnel were generally more receptive.

Each of the four school administrators were interviewed. The Director of Instructional Services and the Principal were constantly available for checking of material, supplementary information, etc. Much the same interview approach was used with these administrators, with some emphasis on more detailed areas.

Students were by and large very open to being interviewed. They were selected on two bases : those actively involved in school affairs ; an equal number of those not involved. An attempt was made to balance age levels, parental income and numbers of male and female respondents. This was not entirely successful as more active students were readily available and those less involved were often reluctant. Student awareness of the nature and scope of the study was relatively minimal, although our work had been announced in the school and written up in a local newspaper. The fact that some of the interviews with the twenty students took place in the presence of fellow students or parents, might possibly have influenced the open expression of their opinions. Interviews with students were more flexible than those with teachers. They did not readily follow the conceptual guidelines we had prepared. On the whole, we found them eager to contribute. The range of student opinion seemed fairly wide, from radical to conservative, articulate to inarticulate. Rapport did not seem difficult to achieve (perhaps because our interviewers were generally young and/or bearded, not at all unusual at Thornlea).

Parents were selected on the recommendation of several administrators. In total twenty were interviewed. As with the other constituencies an attempt was made to balance income-groups and philosophical orientations. A number of parents were selected because of their participation on the Thornlea Advisory Council, others because they were indicated as typical or atypical. Some effective balance was achieved in terms of income and range of opinion, however. Parents selected had all been sent a letter requesting an interview, with a covering letter from the principal of the school. Most parents were interviewed in their houses on week-day evenings, although some were interviewed in their downtown Toronto business offices, one parent even showed his enthusiasm and interest in the school by coming to our Toronto offices for the interview. Suffice it to say that parents were generally open about their views and concerns over Thornlea. In some cases we had to emphasize the neutral nature of our use of the term "innovation" particularly in the case of more conservative parents.

Visits to the school often provided us with clues to follow up in interviews. Information in one interview could be counter-checked in the next and so on.

The most serious limitation in the study was that of time. Not nearly as much time as would have been desirable was spent actually in the school, observing and participating, over the three month period during which the study was conducted. More extensive interviews including more Board personnel, teachers in local schools, etc. would have been helpful.

From a qualitative standpoint we think that we were able to get a comprehensive picture of Thornlea's activities. We were continually impressed by the openness of all people we interviewed in discussing all aspects of the school's approach to education and innovation. We felt that this openness contributed to the authenticity of the data gathered. The degree of openness should also probably be taken as in indicator of one reason why Thornlea is innovative.

A final note should be added on our conception of innovativeness. The 1960s in North America was a period of ubiquitous innovative activity in education. However, during this period there was a tendency to make the adoption of innovations synonymous with "good" educational practices. Numerous innovations were adopted usually without careful assessment as to how they contributed to the goals of education. The trend in the 1970s is toward accountability. The main question now being asked is how can we determine if innovations are worthwhile. Our notion of innovativeness is one which includes the identification of factors which make for a high likelihood that innovations will arise and be considered for adoption ; but it also includes the notion that at some point innovations must be evaluated in terms of objectives that the adopter school or school system holds. We call these the quantitative and qualitative dimensions of innovativeness respectively. This concern with the qualitative dimension or the question of how we can determine if innovations are worthwhile is one theme that runs through this report a theme which is often neglected in a consideration of school innovativeness.

Another aspect of our conception of innovativeness should also be emphasized in order to appreciate developments at Thornlea in a proper perspective. Innovation implies growth and growth is not always a smooth process. In fact, the innovative organization by definition, is a problem solving entity encountering failures as well as successes. Failures are treated as normal aspects of growth and development. This approach is akin to the scientific attitude discussed by some as the "hypothetical spirit" or the respect for probable error.

This is another way of saying that innovation is a risky business and must be recognized as such. We think that the people at Thornlea have shown this recognition. The short history of the school has reflected an approach to education in which ideas that sound promising are seen as worth trying. The problems encountered along the way are seen as a natural part of the pursuit of better ways of doing things. We think that any innovative organization must have this ability to recognize that problems are inevitable and that growth can only occur by treating problems openly and with respect as experiences to be learned from.

We should also like to add a methodological note which is relevant to this point. An innovative organization has its ups and downs because innovation is not a stable process. Sometimes everything seems to be running smoothly. At other times everything seems to be closing in and the pressure and strains unbearable. There was an indication by some people at Thornlea that we were gathering data at a point of high stress which might colour the perceptions of even past events. This must be recognized as a possibility and should remind us that the exact time at which data is gathered may be a particularly important variable in the study of innovative organizations.

With the understanding that this study has been an attempt to capture some of the essential aspects of Thornlea, in a relatively brief and in a somewhat impressionistic manner, we can turn to our preliminary description of the school.

Chapter I

ADMINISTRATIVE AND HISTORICAL CONTEXT

Thornlea is a new Canadian secondary school that has attracted widespread attention throughout the country. Educators and others have been intrigued by the experimental nature of the school. The school's structure seems characterized by a flexibility somewhat unique in Ontario, the provincial locale of the school. Curriculum range extends beyond that of the average school and a significantly large proportion of teachers who apply for transfer to Thornlea are highly trained and widely experienced.

FOUNDATION

The original impetus for the creation of Thornlea came from Mr Sam Chapman in the winter of 1966. At the time Mr. Chapman was Superintendent of York Central District High School Board. This Board served the geographical area directly on the northern boundary of Metropolitan Toronto ; 5 secondary schools served approximately 3, 900 children, from an overall (1967) population of over 38, 000 people.

In the latter part of 1966 and early 1967 discussions began among Mr. Chapman, some board members and a few teachers from the area.

At this time attention focused primarily on the physical aspects of the school design, and the concept of a "resource-centered" school. However, with the addition to the staff of Mr. Steven Bacsalmasi (then a teacher at a local secondary school) in a relatively "undefined" facilitator role, attention began to shift more towards the structural and organizational aspects of the new school. (Mr. Bacsalmasi was later to become Superintendent of Planning & Development of York County Board of Education) At Mr. Bacsalmasi's initiative a number of teachers from the York Central Board's domain were brought together to talk more specifically about the "Social" aspects of the school. The intention was for these teachers to meet over the summer of 1967, examine innovation practices elsewhere, and come up with a proposal outlining possible objectives and structures for the school. Seven teachers were selected representing the various subject domains, primarily on the basis of their expressed interest. Some attempt was made to balance the selection in terms of those more "traditionally-oriented" and those more "change-oriented".

These teachers, with Mr. Bacsalmasi as their chairman, formed the Thornlea Study Committee. The purpose of the Committee as outlined by the Board was :

1. to investigate some of the proposed or existing, educational innovations in the United States, Europe, and Canada ;
2. to make recommendations to the Board concerning the organization and curriculum to be introduced in Thornlea Secondary School. (1)

During the month of June Committee members met with various members and educational personnel in seminars and small groups. A number of workshops on the nature of committee workings were held under the direction of staff from the Ontario Institute for Studies in Education (OISE). (2)

Members were supplied with current research publications and a library of current materials. The Committee met in day-long sessions for a period of six weeks starting in the first week of July 1967. For one week of this time members worked individually preparing suggestions for their particular subject domains.

The Committee recommended sets of general objectives, and behavioural objectives and organizational procedures for the new school (These will be reported in detail in the next chapter).

The report was completed and published in August of 1967.

The early publication and wide distribution of the report throughout York County was an attempt on the part of Committee members to promote widespread discussion and consideration of their recommendations prior to Board approval, rejection, or alteration, Strategically, this ensured that the Board would deal fairly and seriously with the report of the Study Committee. Subsequently, in the fall of that year, the Board accepted the report unaltered. In December 1967 the Principal, Mr. Art Murch, was appointed. While Thornlea was under construction, he spent the better part of the next half year preparing for the opening of the school. Potential staff was interviewed, the Thornlea Study Report was at his disposal as a guideline for the setting-up of the school. Following the publishing of the Thornlea Report, committee members (with the exception of Mr. Bacsalmasi) were not significantly involved with the setting up of the school.

Since one of the Committee's recommendations was a "library-centered curriculum" a librarian was hired well ahead of the opening of the school in order to have the resource-centre functioning by the fall of 1968.

By June of 1968 the staff was hired and the school building was completed. Staff and administrators, including the principal, met prior to commencement of classes for a two-week orientation period. At this time a number of basic decisions about the school were made. These included such items as the decisions about rules of attendance, matters of curriculum content, marking, reporting, and other school rules.

ADMINISTRATIVE DESCRIPTION

During that same fall of 1968 and effective as from 1 January 1969 York Central District High School Board was amalgamated with 21 other local school boards to form the York County Board of Education consisting of over 100 secondary and elementary schools and serving the entire York County from the edge of Metropolitan Toronto 35 miles to Lake Simcoe, a total area of 650 square miles. In January 1969 the new Board served an area with a total population of almost 150,000 people. By September of 1969 the Board served over 42,000 students in 110 schools with a teacher population of nearly 2,000. Over 12,200 of these students were at the secondary level, distributed primarily by geographic location in 13 schools ; these secondary schools were staffed by just over 700 teachers.

Thornlea is situated geographically in the south central portion of the new Board's area near the area of heaviest population density. Recruitment to the school is by geographical boundary. Students with the consent of parents may choose to go to other Board schools, if they provide their own transportation. A number of students are permitted to attend Thornlea from outside the school catchment area. The number of students from outside this area is kept below a specific percentage set by the Board in consultation with the school (10%). If students reside in another Board area a fee (paid to the York County Board) is required.

The senior administrator of the school is the principal. He is directly responsible to the local Superintendent of the Area. York County is divided into four geographical areas for educational purposes ; each of these areas has a superintendent who in turn is responsible to the Superintendent of Operations, who in turn reports to the Director of Education.

York County Board is one of the larger non-urban Boards in the Province of Ontario. Structurally the Board seems more 'streamlined' than many throughout the Province. However, the kinds of structural innovations that occur are largely internal to the Board administration. Generally the Board's relationship with the Province, financially and administratively, is identical to that of every other Board in Ontario.

Apart from the local superintendent, the school has contact with the Board through the Master Teacher Program,(3) personnel from the Organizational Development Unit(4) and a rather special relationship with the Research Office, Division of Planning and Development. Primarily because Thornlea is considered to be experimental quite a number of research studies have been carried out by this latter division of the Board.(5) These studies are made available to the Board and are presented to the school for feedback and evaluation.

Much of the school's direct contact with the Provincial Department of Education takes place through provincial programme consultants in various subject areas. A number of provincial documents outline the scope within which curriculum change may or may not take place in individual schools. These include matters such as establishment of new courses, course content, text books, and so on. In these areas, as well as areas of innovative planning and technique, these staff members act as resource people at the initiative of the school.

ECONOMIC, ETHNIC, SOCIAL CONTEXT

Thornlea must be considered not only in the context of the educational hierarchies above and around it, but also in the context of the populace it serves. In many ways the area served by Thornlea is a complex and changing one. The total population of the Thornlea catchment area at present, is approximately 15,000. Small segments of the school population come from rural homes or small rural towns, others from a growing segment of single family, middle and upper class homes. One of the more predominantly rural, working-class areas centres on the village of Richvale. Families in this area (and often those from the other rural sectors) seem to form a social and cultural unit distinct from most of the population that surrounds Thornlea.

Being so near to Metropolitan Toronto the economy and population mix are influenced almost entirely by proximity to the city. While jurisdictionally the Thornlea area is outside of Metropolitan Toronto a good argument can be made that it is in fact a part of the tremendous urban sprawl on the northerm side of Lake Ontario.

The majority of people in the area are middle and upper-middle class in terms of father's income and residential life style. Recent years have seen a plethora of large single family dwelling units constructed. These developments are usually named as entities unto themselves (Bayview-Glen, Royal Orchard, etc.), though more for identification purposes than for municipal or governmental concerns. Even more recently a number of single story attached condominiums have been built in the area. Some in fact are still under construction. On the whole, the favourable financing of these units plus the attraction of a more localized community with full amenities seems to be attracting younger families with relatively lower incomes.

Nonetheless, the school population seems to reflect a rather strong economic, cultural and life style split between the few remaining rural and working-class families and the ever-increasing middle class families. Much of the area is still undeveloped farm land. A significant portion of this lies fallow either with the expectation of development or ownership by real estate and trust companies.

Ethnically the population is predominantly Anglo-Saxon in origin with some Jewish and Western European families.

Socially the Thornlea area seems characterized by the limiting factor of geographical distances between clusters of homes, small villages and the few local shopping plazas and service-oriented areas. This is not to imply, however, that various 'clusters' of residents are either close-knit or self sustaining communities. While cursory examination seemed to indicate some friendship networks on the basis of geography, especially in the older areas, there seemed to be an emphasis (for adults at any rate) on geographic mobility for socializing. With the resources and variety of the city only 20 minutes to the south this seems fairly understandable. Our interviews with parents gave the impression that friendship and community networks were built around interest groups, transgressing geographical barriers. Interaction among immediate neighbours seems minimal in the newer single family dwellings. One would suspect, in fact, that most middle class families who have moved from suburban Toronto would maintain their kin and friendship ties after their relocation.

To refer to the Thornlea catchment area as a community, then, can be both misleading and erroneous. While there are certain elements of commonality between parents of children at Thornlea, these are diffuse and indirect. Families of Thornlea are not cohesive geographically or socially. While there are many economic and cultural similarities these seem to be a function of the proximity of the area to Metropolitan Toronto and the attraction of the relatively inexpensive housing which the area offers. Occupational differentiation seems at a maximum. From the centre of the Thornlea district one can easily travel to the east and west for industrial concerns and directly south to downtown Toronto for service and business occupations.

This is not to say, however, that those in the area simply identify themselves as "Torontonians". Indeed there seems to be much local opposition to possible political and educational amalgamation with Metropolitan Toronto. No doubt this is in part a function of wanting to keep lower tax rates, and to maintain a more decentralized local municipal government, but it also seems to indicate a conscious desire to not be part of Metro - to somehow identify the relatively open spaces, large plots of land and new developments as distinctly detached from the adjacent urban conglomeration. Many parents expressed an "out of it" feeling with regard to the city and its events. To what extent this turns them inward to one another and the local scene, it is difficult to say ; perhaps it merely serves to promote what we perceived to be a peculiar isolationism, an isolationism not necessarily by design.

ATTITUDES, OPINIONS

This isolationism however, does not necessarily imply some similarities of attitude or opinion among the various segments that Thornlea serves. To the extent that the attitudes of some parents at Thornlea reflect the general attitudes of the surrounding region, the relatively insulated nature of life in the area does find common expression in some shared values and opinions.

By far the majority of parents seem upwardly mobile, and many in fact see their present homes as an investment rather than as a permanent residence. A number seem to feel in some sense that life in York County is "healthier" for their children, whether it be because of the distance from the "temptations of the city", or simply because it is a respectable area.

The fact that all parents interviewed had some positive feelings about the Thornlea experiment may indicate a certain liberalness or flexibility of perspective.This could be seen as the product of the urban origin of most residents and the constant exposure to Toronto and American mass media.

The attitudes of the more rural, lower income families seem correspondingly more conservative oriented, less upwardly mobile and more restrictive than those of most families in the area.

Generally then, the area could be seen attitudinally as predominantly liberal in orientation and somewhat socially conformist, with segments of more conservative attitudes.

RELATIONS TO EXTERNAL ENVIRONMENT

Thornlea's environment consists not only of the families it serves but also the many local and provincial educational organizations.

Much of Thornlea's relations with other primary and secondary schools inside York County and out is handled by the Principal. He spends a large amount of his time speaking in other schools, at parents' nights, taking part in panel discussions, etc., even to the extent of active involvement in a local elementary school as a teacher. Various other staff members participate in activities with other schools ranging from professional development days to York County Curriculum Committees (6) Some teachers are actively involved in county-wide panel programmes, with educational television exchanges and the like. Although many teachers at Thornlea have taught somewhere in the York County System before, many of the informal ties or contacts that must have developed appear severed. Thornlea teachers seem to communicate less with teachers (particularly in the secondary schools) within their own system than outside it. In fact, on some occasions staff have travelled out of the County or out of the Province examining other systems - talking about Thornlea and innovative schooling. The quantity and quality of knowledge that teachers at Thornlea and those at other schools in the area have of one another seems very limited. The school seems much more externally oriented, for example, Thornlea has close contacts with The Ontario Institute for Studies in Education (OISE). OISE personnel were involved in some of the first workshops for the Thornlea Study Committee. During the school's first year of operation, Dr. John Croft carried out an Organization Development project at the school. (7) At present a staff member of OISE (Dr. David Hunt) is conducting a study for the school and York County Board. Dr. Hunt works closely as well with the Research Office of the Planning and Development Division. There have been a number of other formal contacts with OISE personnel. Other university and educational personnel from Ontario and across North America frequently come to Thornlea either for a casual visit or for a more formal examination.

A number of staff members as well have their own direct contacts with various parts of the University of Toronto and York University. The principal himself is on the Senate of York University. As well, the principal sits on the Ontario Universities Council on Admissions. Counsellors and guidance personnel seem to have fairly well-established contacts with University liaison staff.

All secondary teachers in the Province belong to the Ontario Secondary Schools Teachers Federation (OSSTF)(8) The Federation has full bargaining rights for all teachers and is often involved in salary and working conditions negotiations with the various Boards across the province. The OSSTF has a local chapter in each administrative area of York County. Through these, newsletters are circulated among the staff. The school has its own representatives and through OSSTF area committees comes into contact with staff of other schools. The OSSTF holds regular professional development days; these are supplemented by more academic conferences held by the Ontario Education Association(9).

There is a province-wide Principals' Council which offers interschool contact and information exchange. The principal at Thornlea is on the executive of this Council, and as such can play a primary role in this exchange.

Most of Thornlea's contact with community groups is also through its Principal; especially in the first year of the school's operation. The principal received and accepted numerous invitations to speak with local community groups including local service clubs, home and school associations of public schools, etc.

Various staff members at the school have ongoing and periodic contacts with local voluntary associations. These include such things as drama clubs, a local school for the retarded and a number of other interest groups.

More recently Thornlea has been in contact with the local municipal recreation committee concerning shared financing of a swimming pool to be used by the school and the community.

Various groups and individuals from in and around Metropolitan Toronto visit Thornlea either as resource people for classes or just as interested persons. Groups range from a local anti-pollution group to large national and international educational organizations. One day of each week at the school is structured specifically as a visitor's day. The school's Director of Instructional Services spends much of this day responding to various enquiries about the school's operations and generally acquainting guests with the philosophy and structure of Thornlea. On this day, in particular, but as well on any other, visitors are welcome and expected in many of the ongoing classes.

On the whole, Thornlea's communications and relationships with its external environs seem to be characterized by an active and outward-looking principal, and many positive links with the professional educational population of Ontario.

Within this context of relationships to outside bodies Thornlea is attempting to develop a new kind of school. The proposed direction of this development can be best seen through a discussion of the goals and perception of those involved with Thornlea.

FOOTNOTES

1) York Central District High School Board, Report of the Thornlea Study Committee, August 1967, York County, Ontario, p. 2

2) OISE is a provincial institute for graduate study, research and development in education and through an affiliation agreement with the University of Toronto also acts as the graduate Department of Educational Theory of that University.

3) op. cit pp. 7-8

4) See the regional study of York County Board of Education being carried out in conjonction with this study : The York County Board of Education : A Case Study of an Innovative Regional Education Authority, Centre for Educational Research and Innovation, Organisation for Economic Coopération and Development, Paris 1972.

5) In the first two years of the school's operations a number of studies were carried out by the Board. Thus far the results published are for year one only, these include five interim statistical reports and the following final reports :

Where the Boys and Girls Are : Where Thornlea Students Are When Not in Scheduled Classes, With Special Attention to Attendance in the Resource Centre Complex (July 1969) :

Student Attitudes Toward Thornlea Staff, Students, and Organizational Practices (July 1969) :

Student Progress at Thornlea, 1968-1969 : Final Report (September 1969) ;

The Thornlea Community Looks at Objectives for Its High School (September 1969).

6) It should be noted here that some 10% of parents of Thornlea are from outside the geographical boundaries ; their families for the most seem upper-middle class and highly educationally motivated.

7) See Loubser et al, regional study, and Croft, John C., "Organizational Development for Thornlea : A Communication Package and Some Results". Applied Behavioral Science, Vol. 6, No. 1 1970.

8) And through this organization to the Ontario Teachers' Federation

9) Ontario Education Association is a voluntary group, with membership representation from subject domain teacher federations across the province. The subject federations serve primarily as an information exchange mechanism.

Chapter II

GOALS - PURPOSES

Thornlea was originally conceived of as a resource-centred school. Although subsequently the idea of the school itself and its goals expanded beyond this into the social and philosophical realms, the original idea remained. Thus, Thornlea was architecturally designed so that the Resource Centre is the focal point of the building. Directly beside the Resource Centre is a large open "sunken" lounge area for use by the students. This area is well furnished with carpet and plants and is affectionately referred to as the "Jungle". From here the halls spread out on three different levels. Administrative offices occupy one corner of the building. Besides 14 standard classrooms, Thornlea also has 4 Science Laboratories, 5 shops, an Art Room, a Music Room, (sound-proofed) 2 Gymnasiums (with stage), 4 Commercial Rooms and I Cafeteria. Each classroom area is equipped with movable blackboard and tackboard sections, modular shelving, etc., which is interchangeable throughout the school. As well, each classroom has a complete distribution system for Audio : intercom, tape, AM-FM, and phonographic sources all available.

Completed in the summer of 1968, the school seems for the most part functionally designed, though quite obviously some thought has been given to interaction patterns and communications (for example, the interlocking network of office staff lounge and guidance offices). The school is located on a large plot of land, and has available track area, football field and games area. As well, picnic benches are provided for students on a grassed and treed section of school property.

Thornlea opened with a staff of 32 teachers and a school population of 550 students. By the second year of operation the number of students had increased to 750 and staff by 10 to 42. A similar increase of 10 staff took place for the 70-71 period with another substantial increase up to 970 students. Expectations for the 1971-72 enrolment are in the range of 1, 100 students and 62 staff.

We treat Thornlea as a social sub-system with constituent parts including the Principal and his administrators, the teachers and the students. But the school must be seen in its larger social context ; forces outside the school such as parents, the Board of Education and administration, the provincial government and so on are seen as larger system aspects which interact with the school in constant flux and change. It is important then, to see Thornlea, or any school for that matter, in the context of the way in which its boundaries interact with other systems, (e. g. interaction with the Board of Education, the community, the Province etc.) In the case at hand Thornlea's establishment depended on two conditions. The most visible one was a growing and heterogeneous population which necessitated the building of a new secondary school. The second condition was the forward looking orientation of the Director of Education and a number of teachers in the York County system—a desire on their part to design a school which could take advantage of the latest educational thinking and innovations.

Thornlea was located, as most new schools, in a new centralized building, with the same budget allocation as other schools, and under the same administrative hierarchy and decision-making segments of the Board as non-experimental schools. On the other hand, a great deal of time and energy was put into other aspects of the school : structure, philosphy, etc. This combination of a somewhat special status and new thrust in establishing Thornlea, and its placement within a conventional educational hierarchy makes for a complex situation regarding the articulation of goals and objectives.

PURPOSES AND GOALS

Thornlea has perhaps been the subject of more thought and study regarding its goals and objectives than most other secondary schools in Ontario. The three main sources on this topic are the Report of the Thornlea Study Committee(1), the Thornlea Goals Committee made up of staff at the school, and The Thornlea Community Looks at Objectives for its High School(2). We will briefly describe these three reports and follow this with a discussion of their implications.

As outlined in the original Thornlea Study Committee Report (pp. 7-8), the general objectives of Thornlea were to assist the student :

1. to learn
2. to prepare for and to live with change
3. to recognize, to value, and to honour the spiritual, cultural and moral heritage of Canada and the world
4. to develop himself as a human person .

These general objectives were supplemented with five behavioural objectives and eight operational procedures :

Behavioural Objectives

In an environment of increasing individual choice, the student will

1. accept more responsibility for the organization of his own learning
2. acquire competence in basic subjet matter
3. use effective independent study to stimulate the will to learn
4. discern and develop creative excellence
5. be sensitive to the needs and interests of others in the community.

Operational Procedures

1. Provide for continuous progress in a nongraded structure
2. Provide for complete horizontal mobility among the options.
3. Organize a library centered curriculum and encourage competence in independent study.
4. Provide a common fund of knowledge to be learned on the level of individual readiness.
5. Individualize instructional and curricular materials.
6. Allow for greater inter-relationship among the subject disciplines.
7. Provide the facilities and time for the enrolment of each student in his "extra curricular" interests.
8. Encourage dialogue with the community.

Although these various objectives reflect an underlying theme they are stated in very general terms, even the operational procedures. Very little clarification or guidelines are provided for arriving at specific implementing procedures. The committee notes that various operational factors "must be understood by the staff in order to reach their objectives " (p. 5), but there is no discussion of what this implies.

One year after the publication of the Thornlea Study Report a Thornlea Goals Committee, made up of staff, published a statement of possible goals for Thornlea. The general objectives put forth were to develop students demonstrating the following characteristics :

1. interested in learning for its own sake
2. aware of themselves and sensitive to others.
3. capable of developing their potential talents.
4. demonstrate skill in thinking critically and judging soundly.
5. demonstrate the skills required to pursue self-directed learning.

Again we note a lack of specification of criteria of what behaviour would reflect a particular objective.

During the first year of the school's operation the York County Boards Research Office carried out a number of studies, largely by questionnaire. One of these studies concerned staff, students', and parents' perceptions of Thornlea's objectives. Respondents were asked to choose and to rank general and behavioural goals from a list that combined the Thornlea Study Committee's recommendations, the Staff Goals Committee conclusions and a few additional objectives included by the researchers.

Perhaps the main finding of this questionnaire study was the remarkable consensus among teachers, students and parents about objectives for Thornlea By relative consensus the main goals of Thornlea were seen as :

1. develop students capable of developing their potential talents.
2. develop students aware of themselves and sensitive to others.
3. the student will accept a shared responsibility for the organization of his own learning.
4. the student will demonstrate skill in thinking critically and judging soundly.
5. the student will demonstrate the skills required to pursue self-directed learning.

In this situation one might expect a fair degree of agreement within groups and between groups about what goes on at Thornlea. Although there was a general agreement that change towards self-directed learning was desirable there was considerable disagreement among the people we interviewed about how this might be achieved. There were a significant number of staff, parents and students who questioned whether permissive conditions led to self-directed learning and,more particularly, whether this led to what they perceive to be the crux of education--basic academic skills and knowledge. On the other hand, an equally significant number of staff, parents and students who understood self-directed learning to mean the same as self-actualization, according to the needs and interests of the individual, did not emphasize the learning of academic materials per se. These differences took a variety of forms. On the one side, some teachers suggested that certain other teachers were neglecting academic learning skills and knowledge in their courses. On the other side, some teachers felt that certain other teachers focused too narrowly on academic matters to the neglect of the socio-emotional development of the student as a whole.

At a more general level a number of teachers claimed that some students at the same age/grade level are more mature and ready for independent study than are other students, and that the latter required more direction than they were getting in the relatively free environment at the school. Or, as one teacher put it, "how long do you allow a student to stumble on his own before reducing his freedom and providing him with more direction ? "

Whether in fact the two orientations of academic learning and self-actualization are inherently incompatible or can be integrated in certain ways is not for this study to answer. But it is certainly a basic strain at the school.

This problem can be traced back to the general nature of goal and objective articulation. When goals are stated only at the general level, the operational interpretations (or the means of attaining objectives) depend on what individual is doing the interpreting. For example, within the school there seem to be a number of teachers who perhaps are beginning to come face to face with some of the implications of the "progressive" orientation of the school. While nearly all of these teachers appear to accept the ideas behind the school in the Thornlea Study Report, their concern focuses on the interpretations of the philosophy of the school by some of the more radical teachers, particularly on the question of the quality and meaning of academic learning.

On the other hand, we find an equal number of teachers who advocate very strongly the "progressive" direction of the school and perhaps it is they who have been most instrumental in defining Thornlea's innovative approach to courses and education in general. The majority of these people articulate more clearly their personal goals and tend to see the school as a place where they might realize them.

The point is that there are varied interpretation of how to achieve Thornlea's objectives. Sometimes these interpretations differ to such an extent that some teachers and some York County Board administrators feel that Thornlea is not always consistent with its 'originally intended' goals. Since the original goals were not specified it is very difficult to determine if their view is valid. It is probable that the lack of attention to specific criteria in relation to general objectives has hidden some basic value differences within and outside the school.

From the point of view of innovativeness the goals as stated (i. e. in general terms) have a number of implications. First, undoubtedly, the members of the original Study Committee were reluctant to prescribe in detail what Thornlea should be like. Their emphasis on flexibility and freedom to innovate indicates their concern with encouraging creativity. The innovations described in the next three chapters give evidence that this has occurred at Thornlea. At the same time, the lack of specification of criteria or guidelines for implementing these objectives hampers the development of a systematic concerted effort towards attaining them. Without specific criteria it is difficult to assess whether one is successful in attaining overall objectives. What the ideal balance is between flexibility and freedom to innovate on the one hand, and a specific set of criteria for assessing goal attainment on the other is a moot point. It is clear though that it is a major source of controversy at Thornlea.

The goal orientations of students, parents and other groups outside the school now can be considered briefly. Students interviewed had a strong sense that Thornlea was different from other schools. Most, however, do not readily think of the school in terms of its goals or objectives. Their orientation was focused primarily on factors influencing their day to day life, course content, teaching style, etc. They perceived some differences in staff approaches to education but did not think of these in relation to objectives or as learning experiences in a developmental way.

Parents interviewed perceived the school in terms of either their child's academic success and/or general happiness with the school. For the most part, while Thornlea is seen as innovative, little is said about the reasons for this. Some see the school as an experiment, others as a more humanitarian approach to accomplishing the "same as other schools" (which is not defined). Parents seem more utilitarian oriented (e. g. "how will my kid do in University, or a job ? " etc.). This is interesting because the study on The Thornlea Community Looks at Objectives for its High School found that parents did not have this orientation to the school. There are at least two possible explanations. First, the earlier study was carried out in the school's first year of operation. Perhaps our interviews during its third year were at a time when parents are more concerned about these more practical questions. Some comments by parents did indicate this developmental occurrence. A second possibility is that we were more likely to uncover these responses in depth interviews than would be the case in the earlier questionnaire study which presented a list of general objectives from which parents could choose. It should be noted, however, that the earlier study was based on a sample of 200 parents, while we interviewed only 20 parents. Finally, the parents we interviewed did not perceive that education for self-development and education for a job or university were incongruent. Again, perhaps goals stated at a general level obscure more basic value differences.

In summary, there seems to be a high degree of consensus about the general goals of Thornlea emphasizing self-directed learning. Increasingly over its first three years there is controversy and perhaps more significantly, ambiguity among certain segments over the interpretation of these objectives or the means by which they could be achieved. The lack of a systematic approach to the specification of operational procedures for the attainment of goals seems to have created a situation in which general objectives are largely taken for granted by most involved with the school, while emphasis is placed by individuals or groups on specific items such as curriculum content or course structuring.

It is possible over the next while that forces of external pressure (parents and some district administrators) and some internal differences will lead to a more careful re-examination of the nature of goals and peoples differing perceptions and implementation of them at Thornlea. In fact, some staff members have indicated to us that they are attempting to do just this.

This chapter should be seen more as an indication of the tremendous problems which have to be faced by any school which develops and discusses objectives rather than as a critical assessment of Thornlea. It should also be clear that we have applied a stringent model in analysing objectives. There is no doubt that Thornlea is unusual in Ontario in that goals and objectives are even formulated and discussed at all on such a large scale. Nearly all teachers interviewed indicated that objectives were hardly ever were discussed in schools that they had been at before coming to Thornlea. It should also be obvious that the kind of specification of operational criteria to which we referred above cannot be carried out by a school during its normal course of activities. The day to day activities of an innovative school are simply too demanding, and the task too complex for a school to do this unaided.

Some of the innovative activities that keep Thornlea busy in pursuit of its objectives are described in Chapter 3.

FOOTNOTES

1) York Central District High School Board, Report of the Thornlea Study Committee August 1967, York County, Ontario, Canada.

2) York County Board of Education, Research Office, Division of Planning and Development, Thornlea Review Studies : The Thornlea Community Looks at Objectives for its High School September 1969.

Chapter III

ADVANCED PRACTICES(1)

In this chapter we attempt to describe the various advanced practices at Thornlea in order to provide an overview of the substantive innovative activities at the school. In Chapter five we will examine in more detail the development and implementation of three of these innovations as illustrations of the way in which Thornlea has managed specific changes.

Conceptually the advanced practices at Thornlea have been considered according to a four component typology :

1) organization for learning
2) curricular practices
3) technological practices
4) social organization.

By organization for learning we mean, those structural arrangements which affect the students' collective learning climate. Curricular practices are those having to do with course organization, scheduling and specific course content. An advanced technological practice is one which involves a form or use of technology not generally used in other Ontario schools. Social organization practices refer to specific procedures relating to communication and decision-making arrangements among school personnel, students and local school public. Before we list specific practices it is necessary to review briefly how these practices relate to the general philosophical objectives or outcomes of the school as reported in the last chapter. It would seem that the school's central function generally is accepted as facilitating a recognition of individuality on the part of the student with respect to himself and to his peers. Further, to quote from the 1970-1 Thornlea Secondary School general function statement, "Teaching and learning at Thornlea are based on the assumption that education is not a preparation for life ; it is life . . . Teachers are given the opportunity to devise and implement their own courses and to adopt courses planned by others (including students) to their own methods and objectives." Broadly speaking then, the objectives of the school require the provision of an environment in which students through interaction with staff and each other learn to live with change ; moreover, to become a part of change, with each individual recognizing and valuing his own contributions and their relationship to a broader societal context. (Operationally, at the individual level it should be recalled that frequently quite different goal sets were evidenced.)

1. Organization for Learning Practices

Here we have included those formal (rules and regulations) and physical (architectural) structures which have been intended to promote or facilitate specific sets of learning behaviours.

Trimester sessions : From the beginning the school year at Thornlea has been organized in 3 terms - each 13 weeks in length. In general the courses offered each semester are independent of those offered during the following semester. This separation into distinct terms has allowed Thornlea to offer a much greater variety of courses than would other Ontario secondary schools. The intent was to provide for a continuous progress structure and at the same time a broad range of specific course choice at the individual level. Many people, it would seem, have accepted this practice as basic to the success of Thornlea. While several secondary schools in the Province are now experimenting with a form of trimester system Thornlea was the first so far as we are aware.

Home group system : The school attempted a home group system to facilitate the development of a sense of community within the student body. Hopefully such a structure could counteract the effects of individual time-tabling and other individualistic emphases in the school. In a new school, an intrinsic spirit of community is difficult to achieve, particularly when students move physically (as we have mentioned) from learning experience to learning experience as individuals rather than as a class. Several staff and parents pointed out during interviews that in the first year particularly while there was great excitement over being members of the new school the feeling could be attributed more to a halo effect(2) than to a genuine esprit de corps. To facilitate student interrelationships and to provide a group to which individuals might relate the principal developed the idea of a home group system. Groups of students were assigned alphabetically to a specific home room and teacher. The idea, however, from the beginning of the school has been a failure. Both administrators as well as several staff have suggested that the failure might well result from the arbitrary assignment method--i.e., it is inconsistent with Thornlea's individual choice ideology. A second reason could be that the students perceive the home rooms as performing only an administrative function (e. g. attendance records, school announcements). Socially, academically and intellectually the home groups seem ineffectual. The "jungle", halls or entrance lobbies provide for most students the opportunity for social interaction. While administration and staff have attempted to modify the home room plan (in terms of meeting time and specified function),the plan has still not jelled in practice. At the present time staff are considering the feasibility of allowing pupils free choice of home room.

Pupil autonomy : A third feature of Thornlea has been the high level of pupil autonomy in course selection and degree of participation in specific courses. However, it would seem that central to the (academic) success of such a degree of autonomy is (a) parental or home support (b) peer group support and (c) an effective guidance counselling programme. Those pupils who have (a) and (b) supports particularly, are highly successful.Where there is little or no home or peer support, the school has been able to compensate in part with its Student Services Department, and the activities of its Director. Generally those students with little parent or peer academic support who see success in school as necessary for desirable occupational achievement, state that the school should be more structured (that is, regimented and routinized, with staff assuming the major responsibility for room and course selection and for grading procedures). A number of 4th and 5th year students who have been in attendance since the school's opening have now been confronted with the need to perform at a level not defined by themselves but required for admission to university. Moreover, certain students sho had been performing well by their own and staff standards now feel that they had been misled in that they lack prerequisites demanded for certain subjects required for university entrance. During interviews some parents and teachers stated a concern that students were not being adequately prepared to cope with the academic demands of university. It is interesting to note that student concerns focus on the structural aspects of educational prerequisites, while many parental worries are directed towards the content of the learning experience. For example, students were concerned about the need to follow the proper sequence of activities (courses) in order to satisfy course requirements for university entrance, whereas parents were concerned that students experience and assimilate actual 'academic' knowledge or set of facts.

Independent learning courses : As the school programme has developed greater provision has been made in the Social Sciences, English, Music and in the Physical and Natural Sciences for students to define their own programme within specific course (in consultation with the staff member responsible for that course). This practice has been generally successful in that the teachers and students concerned have been "satisfied" with the outcome[3]. It should be pointed out, however, that the students undertaking such courses are not "typical" in that they seem to have internalized a high degree of self-motivation. These students, because of a rather extensive knowledge base and an attitude and value set in concert with the staff involved in such courses, are well equipped to work relatively independently of teacher supervision and yet at the same time proximate what the teacher perceives to be the desired outcome. A modification of the independent learning course is the individual progress course where each student or group of students follow a defined sequence of activities but at his and their own pace. On the basis of the concerns expressed by the students it seems that experience in this type of course might well facilitate student performance and thus diminish the problems outlined in the section on pupil autonomy.

Differential Course Phases : Generally most subjects are offered at different phases or levels of difficulty and student responsibility. We observed too that an inherent danger in this system is the likelihood of students finding themselves locked in a stream much as was the case with the former "Robarts' plan" (4). In practice, streaming in the phase system occurs within subjects and their prerequisites rather then cutting across a total programme.

There is one important difference; in flexibility the phase system in conjunction with the trimester system offers the student a 13 week trial period in which he can demonstrate his "fit" with respect to a specific phase. This offers considerable flexibility in making phase adjustments either upward or downward.

Team Teaching : The practice of two teachers working together to present a course, while not done extensively, does provide an interdisciplinary perspective.One example is a course in Geology for Beginners, which was taught collaborately by staff members from the Science and Geography departments.

Apprenticeship teaching : During the past two years several senior students have been encouraged by certain staff members (Music, Theatre Arts, Social Sciences) to give part of a course to fellow students usually at a junior level. In Theatre Arts and Music particularly, capable senior students have been encouraged to assume a major responsibility with little visible supervision in defining course content and presentation methods for their junior colleagues.

Double period : For a two day period for three weeks classes(5) were doubled in time (to 90 minutes). The rationale behind this was based on some teachers' feelings (particularly in English, Social Science, Theatre Arts and Science) that 45 minutes was too short a time to develop interest in a topic. There was a feeling that'often one just became involved in a topic and the period would be over. On the other hand, some teachers (particularly in French and Mathematics) felt that the double period was too long a time to sustain student interest and motivation in their subject matter. It was agreed by all staff to experiment with the double period on a trial basis and then evaluate its advantages and disadvantages.

2. Curricular Practices

An advanced practice in curriculum is one which presents a new perspective within a specified course or which changes the content or structure of the course In general, it has been the practice of the school administrative team and of the teaching staff to support and to encourage curricular modification and adaptation according to personal teaching styles and abilities, to a greater degree than has been the case in most Canadian schools. Some teachers, however indicated that the support and encouragement were akin to a competitive ethos, an "I'm-doing-a-new-course-this-term-what-are-you-doing ?" At any rate,new courses, praticularly at the lower phase levels, appeared regularly in each term brochure. In some cases teachers, often in response to evaluative questions and comments raised primarily by the Director of Instructional Services, the Principal, and Department chairmen continually re-examine and redefine their current practices such that "new" courses frequently emerge. The re-examining redefining process also has resulted from students or student-teacher discussions of individual interests and concerns.

As already stated the Principal recruted individual staff members whom he identified as being competent in responsibly defining student academic activities. This demonstrated competency, combined with the high degree of trust provided by the Principal and the collegial support of other staff members,have resulted in continual experimentation with new courses or modification of previous courses. Innovative activity then, has high normative support among staff. This seems to have been the expectation of the student body particularly, and to a lesser extent the parents (although certain of the latter group, when interviewed, indicated that there was too much experimentation at the school). We would emphasize that the Director of Instructural Services plays a strong role in reinforcing the "experimentation ethos" through his continual discussions and questioning of individual staff members, as does the Principal through his constant readiness to discuss modifications, alternatives and new courses individually with each staff member. It should be pointed out that all departments are not equally experimental. For example, the teaching staff of Modern Languages and Mathematics,because of a generally accepted consensus that subject or discipline mastery could be attained only through a student experiencing a sequential approach,offer a relatively orthodox programme in relation to the rest of the school The study team was intrigued to note that one teacher who was a "proven expert" in mathematics was experimenting with a non-sequential progress mathematics programme but only with students who had registered at a low phase. It was still accepted that for higher level (University) preparation a sequence approach was necessary.

Interdisciplinary Courses

Some inter-discipline courses have been and are being taught at the school. These sometimes combine team teaching with a wide subject content. Following are brochures descriptions of some of these courses .

Media Arts-Television

The theme of this course, which is experimental, is "Utopia Through Communication". The aim is to bring a small group of students together in order to show that meaningful communication is a necessary step to improving man's lot in life. Hopefully, the final statement will be a 15-30 minute television programme shaped and produceb by the participating students. At present, it is planned to involve ETV technicians in the final stages of production, and it is possible that the final programme will be broadcast. Interested students are required to seek an interview well before Subject Day.

The School as Communication

A comparative study of current and possible theories and practices in education, this course is largely engendered by students in Thornlea. It is intended to encourage awareness of living and learning situations in our society. Methods will include extensive reading, field trips, seminars, and resource people from inside and outside school.

The Community and I

This course is open to any student any year level. Students who select this course must have a great desire for learning for its own sake and not just for the achievement of units of credit.

The course will consist of four periods every afternoon (periods five to eight) and will often include the activity period as well. Four credits may be earned in areas of the student's choice, subject to the approval of a teacher. Students are encouraged to select and plan topics that cross disciplines. It is expected that the bulk of the students' credits will however be obtained in the Humanities, Social Sciences and Arts areas. Credits may be obtained in other subject areas providing approval can be obtained from a teacher in that department. Specific selection of credit areas would be accomplished after the course was in operation.

Great stress will be placed on the development of a learning community of teachers and students. This is not an independent study course in the sense that students can isolate themselves from other members of the course to pursue interests that are solely their own.

When in operation the course will divide into three stages :

1. An introductory week of exposure to the tremendous variety of possibilities for investigation in the community through films, debates, speakers, discussions, readings, and a field trip.
2. Following this, students will discuss and decide in groups those activities which seem most important to investigate during the following ten weeks. (The brochure then lists specific examples).
3. During the final week of the course students and staff will exhibit, perform, present, publish, and evaluate for each other the results of their creative and productive efforts.

It is significant to note that the following is pointed out to the students. "Students must be aware of the effect of selecting this course on their other subject choices. Only those courses that go on in the first four periods will be available to them and not all courses are offered in both the morning and afternoon. So when filling out their selection cards students should put those cumulative subjects that are essential for proceeding to the next year level (i. e., Mathematics, French, Science) as their first choices. Students should include four alternates. Admission to this course will consist of the approval of one the teachers involved in it. In addition, each student must give a written or oral explanation of "Why I believe this course is a good choice for me" at least two days prior to approval day.

3. Technological Practices

The persons interviewed rarely discussed technology. Computer facilities (used primarily for data storage), closed circuit T. V. (in most classrooms), language and labs, and audio-tape equipment were taken for granted. One cause may have been the result of the heavy emphasis on individualized learning and teaching as opposed to group (or even individual) learning. These machines, perhaps considered emblematic of man's alienation from work, were rejected in favour of person to person interaction. Also we should point out educational technology as it currently exists is accepted as being oriented for mass processing and teachers tend to denigrate the learning advantages offered by so called "teaching machines".

The secretarial science courses have incorporated an individual student monitoring system by which the teacher can detect individual errors. This and the language lab monitoring system are not unique to Thornlea - they are features of an increasing number of larger schools.

Perhaps the most innovative technological aspect of the school is the architectural design of the student lounge area or "jungle" as it is commonly called and the administrative offices. The jungle is an open area a half flight lower than the main floor level, fully carpeted, with benches and masonry containing large potted plants. Because the walls between the jungle and the administrative offices are glass an impression of openness between students and administration is given. While visitors and certain parents see the jungle as an unnecessary and costly "frill" it does offer an important casual conversation area to all students (we noted students of all ages there). Moreover, because of the carpeting and other acoustical devices as well as its exposure to staff and administration it also serves paradoxically as a study, relaxation and retreat area. Two students observed that the jungle offered an opportunity to identify with other students which, because of individual time-tabling and their reticence to initiate social interaction, was otherwise denied them.

Primarily through the efforts of the Director of Student Services a small group of students have broadcast radio-like programmes daily using the PA system. Programmes included announcements, editorial comment and music. From time to time the Principal and other staff have been invited to give addresses.

4. Social Organization Practices

An essential feature of the social organization has been the climate supported by the management team and particularly the Principal. Basic to this climate is the high level of trust and confidence, already indicated, on the part of the Principal. As a result of these factors a practice of spontaneous or ad hoc committees to deal with a specific issue or set of issues has emerged. This condition has facilitated the perception on the part of staff generally that problems can be resolved with little conflict - a situation which may have been more a function of size and of conceptualizing school problems in insulation from their external environments than of the social climate per se. As staff size has increased the consensus model has been more difficult to maintain, for "deviant" members may gain sufficient support from fellow "deviants" to withstand the conformity sanctions of the leadership team or of another staff subgroup. Moreover, the staff consists of many strong adamant individuals largely as a result of the Principal's recruitment approach of attempting to attract teachers with different orientations and approaches to education. However, the combined effects of imposed budget cuts (at the provincial level), and external criticism of other than conventional approaches to education, have meant that the highly innovative members now find it difficult to persist in their individualized modes and perhaps feel forced into becoming defensive about their actions. Perhaps the anxiety displayed by many staff member is chiefly a function of a high level of frustrated expectation. That is, many had been attracted to Thornlea under the impression that they could be afforded an environment where they could fulfil their teacher expectations at a level previously denied them in traditional schools ; indeed this seemed to be the case initially for they reported only positive sanctions for doing what previously in other schools had been identified as "deviant". However, certain staff members perceived that the Principal was acting as buffer between them and what was discerned as a hostile external environment. Whether the Principal can continue to mediate meaningfully or whether the staff and other constituencies can reconcile these differences over time remains to be seen. (See Chapter 4 for a more detailed analysis of these issues).

The following are some examples of specific major social organization practices at Thornlea.

Thornlea Advisory Council (TAC). At the school's inception the Principal specified a need for a structure which would facilitate co-discussion among parents, student and staff about matters relating to the school and education. Parents were requested to indicate how they wished to participate in such a function. Many, it seemed, who had stated their willingness to participate in formal meetings, had had previous experience in home and school or parent-teacher activities. (Thus, although some effort at geographical representation was made, a relatively unrepresentative group of parents was involved). The Principal contacted specific parents and invited them to a first meeting. Here and at the subsequent meetings he took the initiative in organizing agenda, meeting dates and so forth.

While the mode of selection for staff and student participation is not clear it seems largely based on voluntary attendance and interest. A specific set of staff is designated as permanent members to the TAC ; these people however do not always attend and/or participate and are supplemented by a larger number of staff who attend more randomly. Membership is generally informal and changes according to constituency member interest in current issues. Parents in the TAC seem to feel frustrated as a result of their ambiguity about the kind of role they should play in defining educational problems and solutions. They seem uncertain as to the degree of involvement they should take in attempting to introduce specific learning experiences and arrangements. Consequently, they tend to play a passive role in the TAC. At a recent meeting one parent member resigned because he saw the Council as a non-action group and thus ineffective. While other parents agreed that it was non-action oriented few seemed willing to assume more initiative beyond an advisory function. Apparently few parents are bothered by the suggestion that they are being co-opted and most are satisfied with the discussion-sounding board function of the group. Both students and teachers are much more oriented toward the Instructional Policy Committee as the most effective organization with respect to school policy.

The Instructural Policy Committee (IPC). The IPC affords an arena for discussing programme and course effectiveness and improvement. Proposals for new courses are presented here. During the first two years only staff were involved, although groups of students were invited to attend from time to time on specific issues. As certain students began to play a more significant role in re-defining courses and course content, provision was made for student representation. It is interesting to note that because a rather vocal group of students perceive the IPC as the most powerful organization of the school they have proposed that the student council as presently structured be abolished in favour of a more extensive student participation in the IPC. It has been suggested by several staff members, including the Principal and the Director of Instruction, that parents be included in the IPC. Parents interviewed generally agreed that they should be involved in the IPC but were unable to specify the form of input which they wished to make.

Management Team : - Unlike most schools which have a clearly defined leadership hierarchy of principal, vice principal, supervisors and directors, department levels, consultants, etc. Thornlea has a Principal and one director each of Instruction, Student Services and Administration. Each acts relatively autonomously in his own area. Thus the leadership pattern contains a minimum element of centralization Certain of the parents and students interviewed indicated their preference for a more conventional leadership pattern with a more specific and visible focus provided by the Principal. A large number of staff also indicated that they wanted the Principal to adopt a more traditional mode of leadership. However, it is our perception that the current leadership mechanisms facilitate individual teacher and student initiative in school activities. This decentralization of power further encourages exchange of initiative and ideas among regular staff members

Interrelation of Innovations : There has been some integration of curricular innovations within and between some departments (e. g. the Social Sciences, English, Natural and Physical Sciences, Art, Home Economics, Music and Theatre Arts). The greatest interrelation is through informal contacts between staff and students. A high level of integration is afforded through the IPC although its impact is restricted because of its non-representative nature (self-selecting membership). Since there is no formal master plan specified for the school, individuals who do not share informal group memberships with the specific innovators are not always aware of changes in courses. The emphasis on individuality has tended also to limit a common extensive and efficient communication linkage within the school. Further, the Thornlea Advisory Council has the potential to afford a linkage between the internal and external environments. However, it must be recalled that an integral characteristic of the school programme is the voluntaristic participation by individuals in school activities. The school organization with its various committees offers a great potential for a high level of participation and interrelation of all activities. However, because of the high level of individualism on the part of staff and students, and because of a traditional respect for academic freedom this has tended not to be always the case. On the other hand, it must be pointed out that there is a higher degree of activity integration at this school than in most Ontario schools.

The various specific innovations described in this chapter should be seen in the context of the social structure and pattern of relationships among those at Thornlea. This is the topic of the following chapter.

FOOTNOTES

1) The scope of the study does not permit a complete listing of all advanced practices in the school. We have tended to select those innovations which are most invisible and involve some collective effort. Thus, innovations developed by individual teachers within their own classrooms tend to be neglected.

2) A halo effect is a positive atmosphere which comes from the newness of a situation, and consequently is usually short-lived.

3) For example, the Social Science department has a popular independent study programme.

4) On the basis of elementary school achievement and teacher recommendations a student was assigned to one of 3 programmes when he entered secondary school : (1) a two-year programme which was essentially an opportunity level experience, (2) a 4-year programme with a specialization in commercial subjects, technology and trades, or arts and sciences, or (3) a five-year programme leading to university with the same form of sub-programme options as in the 4-year programme. Because of prerequisites, changing programmes was virtually impossible.

5) Normally each school day is divided into 8 periods (45 minutes each). Within these periods any one class takes place, with students and staff shifting to various classrooms as required.

Chapter IV

MANAGEMENT OF INNOVATION

The formal organizational structure at Thornlea Secondary School is headed by a Principal, and three directors- a Director of Student Services, a Director of Administrative Services and a Director of Instructional Services. The latter three are roughly the equivalent of vice-principals. The Director of Instructional Services, for example,is in charge of the academic programme which is divided into the five subject domains of Languages, Mathematics and Science, Social Science, (social science, geography and history), Arts (art, home economics, music, physical education) and Vocational (commercial, technical). Most individual departments within each subject domain are headed by chairmen.

As an operating system Thornlea may be best described as a relatively diffuse non-hierarchical structure. To describe this it will be necessary to indicate briefly the roles of the Principal, the Directors (especially, the Director of Instructional Services), the staff and the students. Then we will examine the implications of this structure for the patterns in the operation of the school.

Administratively and legally the Principal is the final decision-maker in the school. However, his leadership style and the decision-making structure which has evolved in the school reflect a relatively decentralized system. In fact, the Principal tends to concentrate on external relations more than on internal activities. We take these up in turn.

First, the Principal noted that as an administrator of an "experimental" school there was a great demand put on his time by various outside bodies. Other school boards, other schools, parents with children about to come to the school, and educators of various types from across Canada and the United States are interested in learning more about Thornlea. It would seem that any school which is established as experimental or radically different would create a high level of interest in its surrounding environments. The Principal at Thornlea has found that a large part of his time is taken up in meeting and talking with various people who come from other school systems.

The other major outside involvement of the Principal concerns not people from outside his own school system, but people within his own system to whom he is responsible. These would include the local Board of Education, the associated local central administration (the Director of Education for the system and his staff) and the public (local community residents and parents of children in the school). The Principal was often described as a "buffer" between Thornlea and perceived hostilities in the environment. More specifically, many people felt that the strength and skill with which the Principal acted as an interpreter, expresser, and in many cases a defender of school policy served to insulate the school from outside criticism and pressure. This they felt permitted a kind of individualism at Thornlea within which teachers were encouraged to suggest new ideas and take initiative in teaching methods.

Within the school, the Principal sees his own role as a "facilitator" rather than as an initiator of innovation and policy. While acting as a primary source of information from the York County Board of Education, he seldom enters into substantive discussion of issues within the school, but seeks to identify emerging consensus and to facilitate its development. This process of maintaining a low profile seems to be a conscious attempt on his part to be open to the initiative and feelings of staff and students in the school. Many staff and students reported that it took them some time to adjust to this unexpected role of the Principal since most of their previous experience had been with highly directive principals

The Principal's limited involvement and low degree of control over decisions within the school seems to be part of a conscious philosophy. The one area in which the Principal implicitly indicates his opinion is his trust and willingness to accept what others want to try out, though not without an awareness of what is being developed. Further, the Principal exercises a powerful indirect influence on Thornlea through staff selection and promotion - an area in which he and the local superintendent make all the final decisions,although staff, particularly departmental chairmen, do play an advisory role in the hiring of new teachers. He has deliberately hired a range of teachers from radical, through liberal to conservative in educational philosophy. This heterogeneity in staff is simultaneously one of the strengths and strains at Thornlea.

The Principal's approach clearly creates conditions which encourage or allow innovations to occur. In this situation teachers with innovative ideas or programmes which they have developed or have become aware of have the freedom to try them out. And this occurs on a fairly large scale at Thornlea. However,this arrangement is not without its problems, as we shall see below.

The three Directors operate pretty much independently of each other. It is only during the past year that they have begun to meet regularly with the Principal as a group. They still do not initiate any systematic policy as a management team. The Director of Instructional Services is primarily involved with the courses being offered, methods of instruction, and staff orientation, and as such has the most central role regarding the evaluation of existing programmes and the development of new ones. Partly because of role definition and partly because of his personality the Director of Instructional Services is undoubtedly the most influential "idea man" in the school. Whereas the Principal's connections outside the school concern primarily political, administrative and public relations matters, the Director of Instructional Services is one of the main sources of information about innovations outside the school--innovations at other schools, pertinent literature, current theory and new ideas in education. One of his main activities is to introduce new ideas into the school, and to see that they get circulated to the relevant people. He also acts as a sounding board for teachers who come to him for help in evaluation and restructuring of programmes.

The Director of Instructional Services depends on the Instructional Policy Committee (IPC) as his advisory body. Originally the IPC consisted of one representative from each subject domain in the school. In fact, however, over the last year representation and attendance has become largely a voluntary effort, based mainly on the interest and motivation of individual teachers. Students began to attend IPC meetings regularly in September 1970 and eventually came to be accepted as legitimate participating members. Currently the IPC has a somewhat regular membership of 10 staff and 20 students with varying others in attendance.

The IPC deals directly with matters of new curriculum, new courses and course evaluation. As a source for the design of specific new courses or programmes the IPC wields considerable influence. For example, the "Community and I" course (described in Chapter 3) was brought originally to the IPC. However it seems to be generally understood that staff as a whole have the final say on any issues that go beyond an individual course, i. e., on any innovation which requires some wider support in order to be implemented. Part of the reason for this is the perceived looseness and unrepresentative nature of the IPC. This perception originates in the fact that originally the more radical staff and students were more consistently involved in the IPC, although this is less so now. Because of its somewhat flexible, voluntary membership and unstructured nature, the IPC is loose enough for vague or inchoate ideas to be aired, formulated and developed. Ideas which would become short circuited in a more structured situation enjoy a kind of protective environment in which to develop or be rejected. Once new programmes are developed, those with considerable IPC support are recommended to students, or more generally to staff as a whole. This brings us to the role of the staff.

We can recall that the Principal has recruited a heterogeneous staff of radicals and conservatives in terms of educational philosophy. Most people estimate that the radicals or left liberals make up about 25% of the staff, conservatives a slightly smaller proportion, and the majority tend to be somewhere in the middle. These do not form tightly knit groups. In fact, most people at Thornlea described the teaching staff as highly individualistic. Recently some polarization has occurred between the radicals and conservatives as we shall see below.

Regular staff meetings are held every two weeks. These meetings touch on a variety of issues--some administrative, some philosophical, some political, some curricular, etc. Full background information concerning agenda items is not always available in a formal systematic way. This, combined with the role of cliques, and speculation, sometimes means that staff meetings start with an uneven or distorted knowledge base. This is especially so because the heterogeneous nature of the staff leads to the formation of informal groups or cliques. In general, then, the opportunity exists for participatory decision-making as opposed to hierarchical forms of government, but the school's style of operation and the heterogeneity of staff means that staff do not form a coherent force as a group. On the other hand, particularly strong individuals or small groups who take up the initiative can have a strong influence.

Student involvement (on a formal level) for the first two years was on three levels. Students were represented on the school's advisory board (Thornlea Advisory Council) ; they had their own student council (elected through the house system) ; they formed a School Policy Committee with student representatives from each home room. This Committee had its staff counterpart--a staff School Policy Committee. In the second year the student School Policy Committee was incorporated as a sub-committee of the student council. By this year (the school's third) the new student council rejected the notion of a School Policy Committee for staff or students. In seeking to deal with the question of playing a broader role in the school, the current student council has seemingly collapsed in the midst of personal and political differences among students. To a certain extent much of the energy and attention of more active students has been redirected to the IPC. However, this is largely self-selective and students as a whole at this time have no representative forum or role in the school. Thus, although students attend both IPC and Advisory Council meetings, it is difficult for the average student to see where or how he can be involved.

Finally, completing our description of the organizational structure of the school, there is the Thornlea Advisory Council in which teachers, students and parents participate. As we have seen above, the role of the TAC is primarily advisory and up until now it has not played an active role in the affairs of the school although it has provided a forum for the joint discussion by these groups of the school's objectives, problems, and programmes. It has not been a significant source of new ideas. Consequently, there is a growing feeling that parents could be provided a more meaningful role in the school in the Instructional Policy Committee. Other efforts to include parents are newsletters, a column in the local newspaper, frequent parents' nights and some use of parents as resource people.

We would now like to examine the implications of this structure for the patterns of communication and influence, particularly from the point of view of innovativeness. The main area to be considered is the set of patterns concerning relations between teachers and administrators and relations among teachers.

As we have noted, the Principal seems to act as a "buffer" between Thornlea and forces outside the school. While this is appreciated by most teachers, there is also a feeling that this kind of arrangement is inherently unstable. They perceived a lack of stable communication channels between outside bodies and Thornlea as a system-information about Thornlea available to outside people comes to a certain extent through a single person, the Principal,or through occasional observations or is otherwise based on speculation in lieu of knowledge. Some teachers feel that this situation is unstable in that if the Principal were to leave there would be no pattern of established communication between the school and its outside environment.

Internally, we have noted that the Principal plays a mainly passive role. A number of teachers stated that this allows particularly articulate or strong individuals or cliques to wield a disproportionate amount of influence. The less verbal or more cautious teacher finds himself in a situation where he feels that he can no longer assume that the school will operate on the basis of rules and regulations. If he does not speak up, others influence the direction of the school. Almost all teachers interviewed mentioned that it took them a few months to adjust to this unexpected role of the Principal. This probably partially reflects their prior experience with conventional principals.

It would be deceptive to describe the Principal's role as merely passive. Nearly all teachers interviewed expressed a profound respect for him. It is significant that both radicals and conservatives could identify with him. He was often described using the adjective "strength", and teachers generally felt that he was primarily responsible for integrating the various forces inside and outside the school in maintaining the school's cohesion or viability. One suspects that he was more influential in the school than might appear at first glance. We did find that his influence was likely to occur through more informal means by teachers seeking out his opinion on school matters. In other words, his effect on the school does not seem to be based on the authority of his office but rather on the respect accorded to a strong, objective individual. Since the staff consists of individuals with various educational orientations, it is particularly important that the Principal maintain this objectivity. It should be noted that teachers were hired on the understanding that they had a relative degree of freedom until they proved otherwise. There have been cases where the Principal has exercised his right to restrict or influence a teacher.

A significant number of teachers, however, felt that the Principal was too passive. In some cases this seemed to reflect a genuine interest in having his contribution to philosophical and/or educational issues ; in others a need for support and criticism from an established authority. For example, some felt that he should be scrutinizing the programmes of the school more closely. Thus, the role played by the Principal seems to allow a high degree of innovation to occur, but some teachers indicated that this tends to be selective in that it arises from particularly strong, individualistic teachers with articulate innovative ideas. Some of the more reticent teachers who might require a higher degree of active support and encouragement in order to be innovative, seem to have difficulty in this system.

Finally, the question of the evaluation of the worthwhileness of innovations arises. As the Principal often avoids public statements on the quality of new programmes in his non-directive style, the evaluative role is shifted elsewhere; perhaps this is also a recognition of the fact that, within the organizational structure of the school, the primary responsibility for evaluation rests with the Director of Instructional Services, the Instructional Policy Committee and more recently a number of staff committees specially established for this purpose. Innovations described in the last chapter often occur as a result of at least implicit evaluation of the inadequacy of existing programmes and structures. Major innovations which are adopted are evaluated at least in a subjective way. However, innovations which occur at the individual course level are usually the prerogative of the particular teacher. At this level, the development of specific innovations as a response to dissatisfaction, or the evaluation of new attempts depend largely on the individual's interpretation of the general goals of Thornlea.

The concern with evaluation at the general school level has increased during the past six months. Perhaps this is a result of taking stock after three years of operation. Or, perhaps, it is a response to recent external pressures from some parents and Board administrators. At any rate, a system of Evaluation and Improvement Committees has recently been established examining such topics as Individual Progress, Grade XIII, Independent Study, Interdisciplinary Courses, Subject Selection Procedures and so on. Although some of these committees existed during the first two years of the school, the more comprehensive concern with evaluation is a recent development. In the past, innovation and evaluation tended to occur more in relation to specific programmes and was more ad hoc than systematic. In this situation it was not always readily apparent to what extent criteria for evaluation were related in a systematic manner to the school's goals. This, of course, goes back to the fact noted in Chapter 2 that Thornlea's goals were stated mainly in general terms and open to individual interpretation. To what extent the new more elaborate committee structure will lead to the development of more complete and systematic evaluation criteria remains to be seen. The time and energy required to carry out this task is extremely demanding. The high degree of individualism among staff at Thornlea also complicates the coordination of this activity.

The relationship among teachers is one of the very interesting aspects at Thornlea. Perhaps the clearest way to analyze this is to describe first some recent comments in the literature on the relationship between norms and innovativeness. First, it is possible that a norm(behaviour expected) which favored innovation could develop in a school. As Miles points out "people would feel encouraged to innovate, would feel that they should innovate, create, experiment if they were to be accepted in the group."(1) At a more general level a complex of norms regarding openness, trust and support in communication are crucial for innovations.

Openness of communication refers to the degree to which people talk with each other and share their ideas about what they are doing in a direct, authentic fashion. The openness of communication between teachers about what they are doing in the classroom is one variable which has been found to relate to school innovativeness.(2) It is well known that in most school systems this kind of communication among teachers is very low.

Authentic communication is obviously related to norms of trust and support. When people in a social system trust each other they are more likely to feel free to tell them what they are doing. It is important to note that trust is not blanket approval of everything that goes on. Rather, it is more a feeling of confidence that one is not going to be criticized and sanctioned if one shares one's ideas or practices, even those ideas and practices which fail. The relationship of trust to support is evident. Support is not unqualified approval of everything, but is more a positive supporting orientation toward helping people sort out their experiences in terms of failures as well as successes. Since innovation is a risky business, teachers need this kind of support in order to feel free to innovate and to communicate their practices to each other.

We can best sum up these points by indicating what is likely to happen when norms of openness, trust and support occur together in a school. First, the circulation of new ideas and practices will be maximized so that people in the school gain the benefit of each others' knowledge. Second, mutual support provides a climate of security and assurance necessary for innovation. This is especially important vis-à-vis pressures that might be put on the school by outside groups. A third point and one which is often neglected in studies of innovation refers to the likelihood that innovations will be evaluated in terms of what the school is trying to accomplish. Open communication, trust and support will mean that people will feel free to offer suggestions or criticisms and will feel at ease in receiving same. When teachers discuss their ideas with others, receive suggestions, and this is done in a free and open fashion, they are more likely to reformulate their ideas in a more thorough and sound way, or alter their position. This functions as a form of evaluation. Note, however, that this is an informal evaluation and is ongoing. Moreover, it is not a forced evaluation. It provides valuable feedback to the innovator on the basis of which he might make further changes, but the changes are not forced on him. Overall, then, the school which has the kind of normative climate which we have just described is likely to be more successful at innovation. Let us now look at Thornlea in the context of this model.

There is definitely a general norm of innovativeness at Thornlea. At the beginning of each year there is an orientation week for new staff members where the nature and philosophy of the school are discussed. This would seem to integrate many of the teachers into the atmosphere at Thornlea where change and experimentation at the course and school level are welcome and desirable. Thus, there is an ever present atmosphere of change in the school which is bound to affect all teachers in one way or another. Some teachers who had labelled themselves as relatively conservative reported that they made significant changes in their courses when they came to Thornlea because they became aware that there were other approaches and that they were free to try them.

The level of trust and support among teachers appears to be cyclical in nature. During the first two years of Thornlea's operation some felt it was generally higher. At the beginning, the small size in staff, the excitement in a new experimental school, and other factors presumably accounted for part of this difference. Whatever the case, currently the level of trust and support among teachers as a whole seems somewhat lower and can best be described using terms such as toleration and respect for privacy or reluctance to interfere rather than positive support. Of course, this is not true for all teachers, but it does seem to occur on a significant scale. The cyclical quality of the level of support seems to vary with issues or crisis situations in the school. For example, when the school as a whole feels threatened unity is at its highest ; in times of relative stability, tolerance is the norm among many individuals.

As might be expected, authentic communication in this kind of atmosphere is not always high except among cliques or subgroups on the staff, although again this will vary with the issue at hand. If teachers who are trying out new methods or programmes know that they are being just tolerated by many others; if they know that some others are likely to criticize what they are doing rather than provide positive and constructive feedback they will not feel free to talk about their problems and questions for fear of exposing themselves to negative scrutiny. Teachers at Thornlea do not seem to communicate readily to each other about what they do in the classroom, their personal feelings or doubts about their approaches and so on. Again this is somewhat different among various subgroups which often centre around similar subject matter, or philosophical approaches. It is not unusual to see teachers discuss educational issues at length during and after school hours, but this tends to occur among subgroups. Consequently, awareness of activities of other teachers who have similar approaches is often at a higher level than awareness of the activities of teachers who have different approaches. The low degree of constructive feedback from colleagues with different views would seem to be a loss from the point of view of qualitative innovativeness. Almost without exception, teachers interviewed or spoken to more casually lamented their lack of knowledge of what other teachers were doing.

It is important to see this lack of communication at Thornlea in the wider provincial context ; Thornlea teachers do seem to know more and be more concerned about what other staff are doing than in most Ontario secondary schools. It is our feeling that the more general norms or expectations of innovativeness prevail at Thornlea, but within this staff operate largely on their own rather than in a cohesive, unified group.

When direct communication is low, the circulation of information depends on indirect means. Teachers may probe students about other courses they are taking, or rumours circulate among teachers about this or that course. Certainly the potential for misinformation or distorted communication is high. A high level of rumour or distorted communication in an organization further reduces authentic communication because it leads to suspicion, sensitivity, polarization and withdrawal.

This polarization has occurred to a certain extent at Thornlea. As we noted before, despite the individualistic nature of the staff there is a rough balance in total numbers between radicals and conservatives with moderates forming the majority. However, the radicals seem to have exercised more initiative and thrust in the school than the others and this has apparently led to strain. There is some feeling that the radicals have a disproportionate influence and that the value of their innovative work is not being assessed either by themselves or others. There is a suspicion by some that many of the new things they are doing are of questionable worth. The more conservative members seem especially concerned with the quality of academic learning in many of these new courses. This may represent incompatible value differences among teachers, but our point above is that since these groups do not communicate directly with each other there is little possibility for mutual adjustment and arriving at areas of understanding.

What is the effect of all this on the school's capacity to innovate ? First, teachers do not get the full benefit of each other's ideas. Second, teachers do not learn from each other's mistakes, nor do they benefit from constructive feedback from professional colleagues - the very kind of feedback that would serve to upgrade the quality of innovations. This could be especially effective at

Thornlea if there was more open communication between people with different perspectives. In this sense, the heterogeneity of the staff could be more fully utilized. Third, the low degree of support and the noticeable polarization among staff is sometimes a source of serious internal strain at Thornlea.

We have attempted here to highlight some of the problems we perceive in Thornlea as an innovative school. Many of these seem to have been inevitable. Thornlea, like any new, experimental school can be expected to face strains after the excitement and protective status of its first couple of years of existence wear off. The heterogeneous nature of the staff, which is one of the strengths of Thornlea, can be expected to present problems over time.

Nor should our comments be taken as an indictment of Thornlea. The people at Thornlea have shown a tendency to self-reflect about their problems. Recently, partly in response to the kind of staff tensions outlined above, the staff went on a live-in weekend. For many this was a satisfying event, where differences in approach and outlook were brought more freely into the open. A significant number of teachers did not go on this weekend, some undoubtedly were occupied elsewhere, others perhaps slightly intimidated. At any rate, more direct and open communication is needed at Thornlea and one weekend is at least a beginning. This tendency to self-reflect and to face up to problems is a necessary part of any innovative organization's growth.

We would now like to extend this analysis to include students, parents and outside administrators.

As pointed out previously, there is a small group of students involved at the school political level. These number perhaps up to 50, but with a core of approximately 20. Level of student involvement at Thornlea seems to be only slightly higher than in other schools, at least regarding formal structures.

In one way Thornlea students are faced with a special problem. The trimester system coupled with continual innovativeness on the part of teachers makes for a large variety of courses from which the student must choose. The heterogeneity in types of teachers from radical to conservative complicates the problem of course selection. We must also recall that a fairly high degree of permissiveness and respect for individual student choice exists at Thornlea. A number of teachers felt that this situation has led to a significant number of students "goofing off", choosing "easy" courses or being isolated from the learning experience in other ways. At the same time a significant number of students seems to have benefited greatly from these conditions. However, the average student at Thornlea appears to find himself in a complex situation regarding the selection of his courses and programme, even though the school provides much more written descriptions of courses, and personal guidance counselling than most Ontario secondary schools.

Despite the Thornlea Advisory Council and considerable effort on the part of the school to disseminate information, parents we interviewed did not seem to be much more involved or informed than parents at other secondary schools in the Province. The surrounding community of Thornlea, as we have described in Chapter 1 is heterogeneous. This means that parents do not form a cohesive group. There is a distinct lack of contact among parents, except through small ad hoc subgroups. The effect of this is that parents relate to Thornlea on a very individualistic basis, and usually only when specific problems arise involving their children.(3)

Innovative schools seem to require more parental involvement than more traditional schools. By definition, innovative schools are doing many new things which cause parents to wonder what the purposes of new approaches are, what will be accomplished and so on. Without direct involvement, parents obtain this information about what is going on from rumours and other indirect means which are very open to distortion and exaggeration. There was virtually a consensus among all those interviewed at Thornlea that the amount of misinformation circulating outside the school about its activities was incredibly high. The danger in this cycle is that wonderment, rumour and concern on the part of parents grows in isolation from the school, so that parents only communicate to the school when a crisis or something negative occurs. The ironic part about this is that many people at Thornlea are genuinely concerned to find a way of having greater contact with parents. Thornlea does seem to do more than most schools in an attempt to initiate parental contact. However, Thornlea is not perceived by parents in the same way as an average school. This combines with a felt ambiguity and confusion on the part of parents about what their role can or should be in this new school. Consequently, in spite of the school's efforts parental involvement at Thornlea is still relatively low.

The final set of external relations concerns the Board of Education, the Director and his staff. The level of support for Thornlea by the Board and the Director is generally very high. However, recent strains have developed at a more specific level between some of the Director's staff and the school. There is a fairly high level of suspicion and mistrust of the main district administrator on the part of many of the teachers at Thornlea. On his part, he disagrees with some teachers' operational definition of Thornlea's objectives and has reservations about the educational merits of some of their practices. As usual, in situations of mistrust, communication is reduced to a minimum and the parties involved rely on indirect means of learning about each other. Since communication is not open enough the heart of the issue has not yet been faced and there is little room for mutual adjustment. The details of the controversy are not important at this time. Suffice it to say that they have to do with differences of opinion in the interpretation and operational definition of Thornlea's objectives. The main problem is that significant opportunity to discuss these differences openly has not yet occurred. Recently, informal meetings have been set up betweenthe administrator and some teachers at the school to air these differences. The outcome remains to be seen, but such a development promises to open up matters for the purpose of arriving at a situation more mutually satisfying. On of the encouraging aspects of the situation, and an indication of the kind of relationship the school has with Board administrators, is that the administrator has not wielded his formal power to enforce his own views on the teachers.

It is now important to pull together in a direct and concise fashion the main ideas of this chapter.

The recognition and approval of Thornlea as an innovative school by the Board, the Director of Education and the community set the broad conditions for its freedom to innovate. The Principal's strength vis-à-vis outside bodies, his trusting stance and facilitating vote within the school provide the specific conditions for innovation. The Director of Instructional Services, and a large number of innovative, creative individuals on the staff lead to a large number of specific innovations being proposed and adopted. For example, the usual process for change beyond the individual classroom sees an idea go from staff initiative (with possibly a few students) to the Instructional Policy Committee. Here it is more thoroughly formulated and eventually ends up on the agenda of a staff meeting. In this meeting approval or lack of approval is expressed, although usually not voted upon. If some consensus is not achieved the item would go back to the individuals concerned for reassessment and reformulation and be presented at a future meeting until consensus is reached or opposition decreased. Changes are seldom designated as formal experiments or pilot projects; although they might be indirectly understood to be so. Evaluation mechanisms at Thornlea are quite varied. External to the school the research of the York County Board of Education's Division of Planning and Development provides general feedback concerning attitudes of various segments, desires of others, perception of the school, feelings about objectives, etc. As well, OISE and the provincial Department of Education consultants do play an evaluative role in some cases. Within the school, ad hoc committees or student-wide or staff-wide votes have been utilized to arrive at evaluation of specific innovations. Much evaluation of innovations at the individual course level is carried out at the initiative of the teacher. For example, a number of teachers ask students at the end of the term about their courses. Again the fact that a variety of interpretations are placed on Thornlea's goals presents problems. The recent more elaborate set of school-wide evaluation committees promise to meet this problem in a more thorough way.

The analysis in this chapter of the general structure and process is elaborated on in the next chapter through an examination of some specific major innovations which Thornlea has developed and adopted.

FOOTNOTES

1) Matthew Miles, "The Development of Innovative Climates in Educational Organizations", Stanford Research Institute, Menlo Park, California, 1969.

2) Mark Chesler and Halim Barakat, "The Innovation and Sharing of Teaching Practices I : A Study of Professional Roles and Social Structures in Schools", Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 1967.

3) It should be pointed out again that most of our data are based on interviews with 20 parents.

Chapter V

EXEMPLARY INNOVATIONS : IMPLEMENTATION AND IMPACT

In this chapter we examine the development and implementation of three specific innovations at Thornlea as illustrations of the way in which the school has managed specific changes. These innovations have already been described briefly in Chapter 3 : (1) structural flexibility and the trimester system, (2) a new course offering entitled "The Community and I" and (3) student membership on the Instructional Policy Committee. It is important to realize that these specific innovations were selected primarily on the basis of their visibility and general awareness of them within the school. An attempt was made to have examples fall within the four component scheme used in Chapter 3. If this chapter seems to give disproportionate emphasis to certain innovative activities and not to others, it should be remembered that these are only examples chosen to illustrate some factors in the nature of change at Thornlea rather than the entirety of the school's activities.

ADOPTION AND IMPLEMENTATION OF INNOVATION

1. Structural flexibility and the trimester system

The initiative and direction for the trimester system came directly from the Thornlea Study Report. Since the trimester system was established right from the beginning with the opening of the school, the question of implementation is not relevant. Its main impact on the school which we take up below is the flexibility it provides for further variety and innovativeness.

2. The "Community and I" course

The initial discussion about this course occurred at two different levels in the school. The Director of Instructional Services along with a few of the more 'change-oriented' teachers began to discuss the inadequacy of a forty minute period for meaningful teaching and learning. This grew into a discussion of utilizing resources in the local community more effectively. Similar discussions took place among one teacher and two of his students, although this centred more on the need for "peer-group study" as opposed to Thornlea's original emphasis on individualized learning. Perhaps others elsewhere discussed these ideas. To state that the course had a single creator then, would be incorrect. Rather it came about as the cumulative effect of the interaction among a number of individuals, and the subsequent informal evaluation of staff and students.

The course proposal was presented by this group to the Instructional Policy Committee. Eventually through long discussion at the IPC and because of growing staff resistance to the course, a proposal was brought before a regular staff meeting. Many people in the IPC felt that the decision about this course had to be more participatory as its structure (4 periods in length) would affect the rest of the school. However, some conservative staff members were more concerned with the content of the course. The original presentation to the staff meeting was done by one of the students involved. Staff reaction was generally one of confusion over the nature of the course and more specifically, hesistancy about its design and intention. Although it is unusual at Thornlea for a specific course innovation to come before a staff meeting this case illustrates that where the scope of any course is seen to influence the school generally (e.g. timetabling, 3 teachers from different disciplines, etc.) it is brought forward for questioning.

Subsequently a much more elaborate course description and rationale (incorporating some suggested changes) was written up by the same students and staff (including the Director of Instructional Services) with the assistance of OISE personnel and people from the provincial Department of Education. This more comprehensive document was then presented to the staff, this time by the Director of Instructional Services, and was accepted with a minimum of friction, although some individuals had personal reservations about its likelihood of success. Overall, the adoption and implementation of the "Community and I" course followed a pattern which seems to be fairly frequent at Thornlea, at least for major innovations. A small number of staff and/or students begin to discuss an idea. It is then discussed more fully at the IPC, although its first formulation is usually handled informally by incorporating some changes and developing the idea further. In the final analysis those who still have reservations about the change will not attempt to veto it. They are more likely to take the position that if others want to try it they are willing to go along with it.

It is interesting to note that the adoption of the "Community and I" course raised a larger question at the staff meeting. Should staff vote on issues like this ? Do they have a right to 'veto' this kind of proposal ? The question was never formally answered, except that the norm of 'tolerance' prevailed. A vote was taken and the course was accepted with some minor alterations, with the informal understanding that staff would not veto specific issues.

Because of more articulate opposition and the 'radical' nature of this course it is more clearly seen as a trial innovation than are many other courses at Thornlea. External constituencies seem to have limited knowledge about this course.

The course is carried out by the actual initiators of the "Community and I" with the aid of OISE and provincial Department of Education staff. How the course will be evaluated is not clear, although certainly it will be carefully scrutinized by many staff at the conclusion of this year. Resistance and facilitating forces seem to have somewhat come together by the course's notion of "peer-group learning", which seems akin to some of the more traditional learning forms yet can also be seen as an innovation in the context of the school.

3. Instructional Policy Committee

Originally the Instructional Policy Committee consisted of one staff representative from each subject domain in the school. This committee was to advise the Director of Instructional Services on curriculum matters within the school. The impetus to create such a body seems to have come from the principal and perhaps a few of his advisors before the actual opening of the school. The committee however, did not work precisely as proposed, one of the main reasons being Thornlea's trend towards informality and voluntaristic membership on committees. This combined with the fact that specific subject areas (French, English) designated in joint subject domains (languages, science, etc.) did not all have shared chairmen and/or philosophical views about educational innovation. Consequently, membership while largely representative in the past has become somewhat more a matter of self-selection, with some emphasis still placed on constituency representation.

During the first two years of the school, a School Policy Committee operated with student involvement at this more general level. However, this committee was discontinued after its second year, thus leaving a vacuum for student involvement at other than informal and general (e.g., Thornlea Advisory Council) levels.

In the fall of 1970 a significant number of students began to attend IPC meetings. Eventually the issue of legitimate involvement for students arose. Staff members most often involved with the IPC were largely in favour of this change. On the whole, their feelings seemed to be one of "students have a right to be on the IPC". Staff on the IPC proposed that students have a certain number of permanent representatives. This was followed by drawn-out internal disagreement among students themselves over the best form of representation. Finally a decision was made in a consensual manner between staff and students to have a trial period of open student membership, self-selective and voluntary.

This informal mode then led to continual attendance by a large number of students (up to 30) from any "grouping" in the school. Currently, (1971), more regular "attenders" have appeared but each meeting always has a new crop of students.

By and large then, the process of student participation on the IPC was initiated by a combination of interest from a small number of students and some staff involved with the IPC.

This coalition of students and staff seems a not atypical pattern at Thornlea. From the point of view of the management of innovation this "coalition" has the effect of developing support for new ideas informally among small groups of staff and students. This support then becomes very instrumental for the further development and successful implementation of innovations. In other words, the coalitions serve to legitimize each group to its larger constituency and to provide a 'critical-support' group that often carry an innovation through. The placement of students on the IPC followed this pattern informally. Student membership was instituted only after it seemed to be generally acceptable by most staff, and the more involved students.

Thus, the management of these last two innovations can be seen to represent a common pattern within the school when relatively major changes are involved. Curriculum changes, however, are not usually brought up for general discussion unless they are seen to affect the school's operation or provincial curriculum guidelines. On the other hand, there does seem to be a trend toward greater staff and student involvement on all levels within the school.

We turn in the next section to an examination of some of the ways in which the exemplary innovations just described have had a feedback effect on the school's internal processes and its capacity for self-criticism, flexibility and change.

IMPACT OF INNOVATIONS

1. Structural flexibility and the trimester system

a) Impact on school : It is rather difficult to outline the specific impact of structural flexibility on the school. Offering students more choices and teachers more options to vary courses seems to have had a very positive effect on most of the school. Teachers feel freer to try out new approaches if a course is only for 13 weeks, as do students in their selection of courses.

Some confusion and disappointment seem to have come about among some students. When one examines in detail the practical realities of prerequisites, time table conflicts, grade 13 requirements, etc., many students often find themselves taking courses they are not interested in, or missing out on ones they are interested in. The complexities of course selection also seem to confuse some students. As reported to us this comes through as more a matter of ambiguity than specific dissatisfaction.

Teachers generally seem satisfied with the system and although some wish for more time to plan their various courses, they nonetheless seem to appreciate the scope this arrangement offers them.

b) Impact on the capacity for change : The trimester system itself is an arrangement which facilitates ongoing innovativeness. Within this system it has been possible to try out a number of innovations such as new courses, independent study, double periods, the "Community and I" courses etc. which would be difficult at best with the more conventional system of year long courses.

Perhaps, one restriction of this system is the tendency to accept it as a "given" since it was a basic condition from the beginning of the school. Some people reported certain timetabling restrictions with the current system. Most people also felt that it was an overburdening task for the Principal and the Director of Administrative Services to have to sort out timetabling dilemmas three times a year. One suspects that these frustrations may eventually lead to some basic changes. In fact, recently the notion of "modular" timetabling has been raised as a possibility.

2. The "Community and I" course

a) Impact on school : Although it is actually too early to tell (the course has only just commenced for the last term of 1971), one might make some predictions about the impact of this course on the school. Precisely because it is so innovative (see Chapter 3) it will probably serve to further polarize the staff. Radicals might cite it as an example, conservatives as a negative example. Much will depend on whether the course is clearly a failure or clearly a success. Since no clear criteria of "success" were established beforehand, one suspects this will never be answered in any comprehensive way.

The course itself has altered the school's organization. Many time table shifts and accomodations had to be made (because of the 4 periods required for staff and students each day). The nature and set up of the course itself have signalled a further step in the development of teacher-student relationships. Basically it seems that students in this course have much more say in what is going to happen than they do in other courses.

One might also expect that this course could change the nature of the teacher/student learning relationship. The emphasis on peer-group learning may reduce the individualistic nature of student learning experiences. Paradoxically it may increase student self-direction in learning by replacing responsibility to teachers by responsibility to peers. This, of course, remains to be seen since the course is just being tried out for the first time.

b) Impact on capacity for change : the "Community and I" course has implicitly raised broader curricular questions in the school. One would expect that the nature of other courses will be affected as a result of the "Community and I" experience. That staff and students worked on this proposal jointly implies further co-operation on innovative ideas. The fact that a number of students were involved at the inception of this idea may be an indication of a greater role for students in major changes at Thornlea, which in the past were mainly teacher initiated.

The course itself will possibly lead to more meaningful community involvement in the school in terms of resource people, etc. It could also raise by example the question of altering the current structural system of Thornlea, involving staff, students and the community jointly in more meaningful ways in the activities of the school.

3. The Instructional Policy Committee

a) Impact on school : The inclusion of students on the Instructional Policy Committee seems to have had very much of an effect on the school. Structurally it has altered the decision-making processes of the school, giving students much more access to information channels and a fair degree of influence concerning curriculum matters. Students now have a legitimate authority to make their demands heard and dealt with formally, as well as informally. The energy of a number of students has been redirected away from the internal problems of the students' council to the activities of the IPC. This has to a certain extent left the role of the council unattended to and in a state of disarray. On the other hand, it has made it easier (or more inviting) for a larger number of students to become involved at the IPC level. A significant number of students attend any given IPC meeting (20-30). This in itself challenges the influence of student council leaders and of teachers, if not directly, at least through the opening of more direct channels to information and to the more influential teachers.

This innovation has also served to bring more students into direct contact with more teachers in other than a classroom setting. The very nature of the IPC requires issue-oriented discussion, value explanation and bias interpretation. Such an interface has a different quality about it in the context of decision-making and school politics than the more knowledge-oriented approaches in classroom situations.

The IPC change in membership has affected some staff's perceptions of the committee. Some feel it is "overrun with radicals". Others, "a place for valuable exchange", some tend to take it less seriously now, while others feel exactly the opposite. In some cases it seems to threaten teachers by suggesting the possibility of an articulated student position. Some teachers no longer attend, others more often. Not surprisingly, the divisions of staff reaction seem (with some exceptions) to fall along earlier discussed lines of a radical-conservative split. The committee meets very often now to deal with internal or issue crises. This of course prohibits attendance of any consistency by teachers who must use the activity period for other work (IPC meets sometimes once a week in activity period, the one period per day where no classes are scheduled). Overall the IPC change seems to have provided teachers and the Director of Instructional Services in particular, with an increased source of valuable feedback, a new source of ideas and a highly enthusiastic advisory body. The addition of students seems to have given some pupils added motivation for involvement in school affairs and in some cases to have increased student interaction while perhaps crystallizing philosophical differences.

b) Impact on capacity for change : The process whereby students came to be on the IPC primarily arose out of a genuine feeling on the part of staff members that "they had a right to be there" (see Chapter 3 for details). Teachers (on and off the IPC) soon came to see that student opinion was a force to be recognized and encouraged perhaps more systematically than before. Thus, by providing an alternative view and a new source of ideas, energy and initiative, this particular innovation promoted the capacity of the school to change. And, although some divisions were caused by it, at least an equal number of alliances and co-operative relationships were initiated. In this connection students through the IPC may become more involved in matters and issues in the school affecting their learning than they have been in the past where individualism and a relatively free environment has led to non-involvement and alienation from learning exchanges for some students.

The specific changes discussed in this chapter indicate some of the substantive issues at Thornlea as well as giving an indication of how certain major changes have developed and become implemented. The capacity of Thornlea to innovate, however, must be seen in light of its overall structure and operations analyzed throughout this report.

Chapter VI

SUMMARY AND CONCLUSIONS

Thornlea's innovativeness is due to a unique combination of circumstances. A forward-looking Director of Education provided the strength for the initial idea behind Thornlea. The direct support from the Board of Education and the liberal community climate in York County provided a favourable context within which the Thornlea idea developed. The positive search for a better way of doing things on such a large scale as the designing of an entirely new school is surely unique in Ontario. The planning of the school by the Thornlea Study Committee made up of teachers is another aspect of the unique nature of the school's development. Teachers in Ontario are never involved in the planning of a school. The appointment and hiring of teachers to the Committee for a summer and the terms of reference of the committee (to investigate existing educational innovations and make recommendations) is another indication of the strong support for innovativeness by the York County Board and the Director of Education (1) The culmination of this background work was the Thornlea Study Report. This report stands as a symbol of the favourable conditions and innovative thinking at all levels in the school system behind the establishment of Thornlea. This was a benefit enjoyed by few new schools in Ontario and elsewhere and accounts for Thornlea's initial innovative thrust.

With the establishment of the school another set of factors has contributed to Thornlea's ongoing innovativeness. The strength and skill of the Principal in acting as a liaison between outside bodies and the school is certainly one of the main reasons why Thornlea enjoys a fairly high degree of freedom to innovate. His recruitment of a variety of types of teachers, and particularly, his tremendous faith and trust in allowing his staff to initiate change should be recognized as a formative reason why the school has such a high degree of innovativeness. The Director of Instructional Services contributes to substantive innovative programmes as a source of new ideas from outside the school and as a stimulator of discussion on improving on old ways of doing things. The ongoing questioning atmosphere which he cultivates through his individual efforts and through the IPC is important for the continual high rate of innovativeness at the school.

The complementary nature of the roles played by the Principal and the

Director of Instructional Services should be recognized. It is the combination of the strength and trust by the Principal as a facilitator and the stimulation on the part of the Director of Instructional Services who acts as an initiator that is responsible for the school's climate for change : within this climate, an unusually large number of individualistic, creative teachers develop new programmes and approaches that would not be possible in more traditional schools. Many staff members came to Thornlea because they felt that they could try out new things which they could not have in their previous schools. This central role of teachers is not without its problems, of course, as the more reticent teachers apparently have some difficulty in this free and autonomous atmosphere.

The decentralized and varying decision-making modes at the school facilitate innovativeness in a number of ways. First, it allows for the flexible formation of small groups of varying composition depending upon the issue at hand. For one innovation a certain group of people may come together to carry through; for the next innovation another group of people may be instrumental. The influence of these groups is usually fairly high because Thornlea does not have a centralized, tight decision-making structure. Finally, flexible and somewhat loose decision-making systems allow inchoate ideas to develop without being prematurely dismissed. In this way creative but vague ideas have a better chance of further developing into sound formulations. We have mentioned earlier in the report that this also presents problems for systematic evaluation and attainment of goals. However, it seems that creativity and systematic evaluation are somewhat incompatible, with an ideal balance between the two difficult to achieve. As suggested in Chapter 2 perhaps some articulation of operational criteria in relation to objectives would be necessary as a first step.

The various problems we have noted throughout this report should be seen in a developmental perspective. Thornlea, like any new, experimental school can be expected to face strains during the formative years and especially after the initial excitement of newness has subsided. Moreover, because the school started only with students at the lower secondary school grades, its first graduates will be coming out this year(2). For the first time the reality of what Thornlea is attempting to accomplish is an issue facing the school. At this same time, of course, parents and Board members and staff are beginning to ask about results, although their conception of results seems more traditional than the general orientation that Thornlea has been attempting to develop. Furthermore, after a period in the 1960s of high expenditure and innovation in the educational system of Ontario, there has been a recent cutback in finances and an emphasis on accountability in the Province. This adds to a general settling in the environment within which Thornlea functions as an innovative school.

Another problem which complicates Thornlea's development is its increase in size over the first three years. By the beginning of its fourth year it will have doubled in number of staff and students. Some teachers feel that many of its problems are due to this increase. They feel that the objectives which Thornlea are attempting to accomplish cannot be adequately attained in a large school. In this study we were unable to analyze the impact of growth in size on the school. Suffice it to say that it is a factor which appears to complicate matters for the school.

The people at Thornlea in its third year have shown a concern for self-reflection and evaluation. The recent set of Evaluation and Improvement Committees is perhaps partly a response to external concerns and partly a concern by those in the school "to take stock" after its initial two years of activity. The openness of people at Thornlea and their readiness to discuss and face internal problems is a characteristic of the innovative organization in which problems are treated as natural aspects of growth.

One matter which we have not emphasized enough is the incredible demands put on all individuals in an innovative organization. Innovativeness requires a great deal of time and energy. Innovative schools will be more successful if Boards of Education more readily recognize that these additional demands exist and provide extra resources and moral support, especially in critical periods in the schools' development.

There is no doubt that Thornlea is a dynamic, exciting school. The impact of the various innovative activities of the school can only be truly measured by a much more comprehensive and long term study. To the extent that the direction and nature of innovations and their impact satisfy individual expectations and desires in the various constituent groups within and outside the school, Thornlea will be considered a success or a failure. In our view Thornlea is not likely to be judged a failure by its constituencies, in spite of the various problems we have identified. Given the fact that these problems plague all innovative efforts it does not seem that they will be insurmontable at Thornlea. Moreover no experiment is really a "failure", for experiments if treated with respect and constructive criticism can only lead to further development.

FOOTNOTES

1) See the companion study of the York County Board of Education.

2) One form of evaluation of Thornlea's success that a number of people at the school have expressed to us will be the assessment of how its first graduates will fare in university and in jobs. So far no specific plan for follow-up on the performance of these graduates has been formulated, although informally some people have been thinking of ways to compare Thornlea student graduates with graduates from other secondary schools. This will obviously be a tricky research problem.

Part Four

ROEDOVRE SCHOOL, ROEDOVRE, DENMARK

by

Tom Ploug Olsen

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AUTHOR'S PREFACE

The aim of this report is to describe the structure, organisation and procedures of work of a school engaged in educational innovation. The report is mainly descriptive and is intended, along with five similar volumes, to assist in a general description of the processes of educational innovation at the school level.

At the present time there is no generally recognised and accepted theory relating to innovation in education and the case study approach is seen as the most appropriate method of identifying problems and charting areas for future research. Nevertheless, one of the difficulties of using case studies is that it is very difficult to say whether any particular phenomena is just unique to the individual institution being considered or is of general significance. In attempting to resolve this dilemma the researcher can easily be drawn into a comparative evaluation of the institution under discussion. In the present study detailed evaluation has been kept at a minimum and the emphasis has been placed on setting out the main features of the school at Roedovre.

The information upon which the study is based has been collected from existing reports on the work of the school, participant observation, questionnaires, and interviews. In view of the short time available for the completion of the report special thanks must be given to the teachers and administrative staff at the Centre for Innovation in General Education who gave their assistance so freely.

Tom Ploug Olsen

Introduction

THE SCHOOL IN ITS CONTEXT

The investigations on which the present report is based have been carried out at the Innovative Centre for General Education, a new school administered by the State and located at Roedovre, a suburb of Copenhagen. The study has concentrated on the work of the school in respect of the 15 - 17 year old pupils, in their 8th to 10th year of school experience.

At the present time Denmark has a relatively short period of compulsory education, as the pupils enter school at 7 and may leave at 14. Nevertheless, there is a strong tradition of voluntary schooling beyond the age of 14, both in and out of the ordinary school system. As increasing proportions of the relevant age groups who did not go to secondary school and gymnasium chose to continue their education beyond the minimum school leaving age educational administrators become increasingly concerned with the nature and quality of the education offered to pupils beyond the age of 14. In the mid 1950s the Curriculum Board for the "folkeskole" had emphasised the need for educational experimentation in the 8th to 10th forms, and the official manuals on teaching proposed more practically based courses. It was generally hoped that any experimentation which did take place would provide experience which could be made relevant to vocational training throughout the country, and administrators argued that a special experimental centre was required to test many of the available ideas, and to allow teachers to acquire experience in the relevant educational activities of the 8th to 10th year pupils.

At about the same time, and in an independent fashion, the Town Architect of Roedovre had set out his ideas concerning the possibility of establishing a "Youth Town" where young people could be instructed on the problems associated with choosing an occupation, and could also be taught about public affairs. The Town Architect submitted his project to the Director of Primary and Lower Secondary Education in 1960. Consultations followed with both the National Labour Union Congress and the National Employers' Association concerning the possibility of establishing courses which would continue for 8th - 10th year pupils, educational experimentation and vocational guidance.

It is important to recognise that a very novel step was under consideration insofar as there was a strong possibility that the Danish Government was about to establish and support a secondary school of its own, rather than allow the local community to be responsible for the development of secondary education as in all other cases. Consequently a committee was appointed by the Ministry of Education in 1961. The committee was composed of educationalists and administrative officials, and its terms of reference were to complete the plans concerning the establishment of the Roedovre project. In 1963 the committee reported on the aims and utilisation of the experimental Centre, and in the spring of 1964 a Bill relating to the State Experimental Centre for the 8th to 10th forms was introduced in Parliament.

The Bill reflected the main purposes of the committee's report and proposed that the new school should have four major aims :

i. To test and evaluate new plans for pupils in the 8th to 10th forms
ii. To formulate and develop new ideas and perspectives for the instruction of 15 - 17 year old pupils
iii. To develop instruction programmes in areas outside the ordinary curriculum of the "folkeskole" e. g. banking, insurance, grocery trade, oil industry , in which field houses had been built in the "Youth Town"
iv. To act as a course centre for teachers employed in teaching 8th, 9th and 10th year pupils.

These aims generally reflected the suggestions being made in the Teaching Manuals of the late 1950s and early 1960s which were designed to serve as guides for all Danish teachers. Moreover, the demand for in-service courses from the school teachers indicated a general willingness on their part to become engaged in implementing the new ideas. Nevertheless, despite overall support from educational opinion the Bill did face some opposition. As can readily be seen the original aims (iii and iv) could only be achieved if the school was, to some degree, residential. Opponents of the Bill feared, however, that pupils coming from the provinces might not benefit a great deal from just a brief stay at Roedovre. In addition some opponents were anxious in case the experimentation with the 8th to 10th school years in the non-academic streams might lead to a fusion of the 3 upper forms of the 2 streams and a consequent lowering of academic standards and, maybe, the disappearance of the stream leading to public examinations. Also during the Parliamentary debate, it was claimed by certain spokesman that caution should be exercised in applying only one solution to the important problems of the education of 15 - 17 year olds, especially in a period characterised by rapid economic and social change.

Despite the opposition the Bill was carried by a slight Labour and Liberal majority and the plans for establishing the Centre were implemented, and the buildings established. As the school was exclusively for pupils of 15 - 17 the traditional school courtyard and outdoor playground was omitted and replaced by tiled walking passages between the buildings which could serve as recreation spaces for the pupils. The main building was divided into two areas, 6 large classrooms for general subjects, and a number of special subject rooms. The classrooms are supplied with A V facilities and it is possible to provide links with other rooms in order to make joint group-teaching possible. In addition, the school has a mediatek (library and AV section) and workrooms for teachers. As is to be expected in a school with some vocational training, the rooms for home economics, needlework and metalwork have been furnished as realistically as possible, avoiding the traditional stamp of a school. At the time of writing an internal T. V. room is also being planned. It is hoped that this will serve not only within the school, but also as a means of disseminating the work of the centre to teachers in other parts of the country.

The school began its activities in 1966, but the premises could not be used until August 1968, and until that time teaching took place in the houses of the "Youth Town". Even now not all the planned developments have taken place. The school itself is not yet complete and of the 3 initial phases only 1 is fully complete. The Centre as a whole is short of residential accommodation, and there is not the contact with the provincial districts for which the early proponents hoped. Furthermore, there is a shortage of teaching rooms which has led one teacher to comment, "We get the impression that we are at a lay-by - the school is there, and we may now enjoy ourselves, but we should not get involved in new problems". It is likely that the delay in completing the building programmes can be explained by the fact most of the problems seen in the 60's has found an appropriate solution to day.

Clearly, in establishing a new school specifically concerned with innovation, the recruitment of pupils and teachers is a crucial issue. At Roedovre the school has a wide catchment area, and is highly selective as the available places are four times oversubscribed. The school, however, does not function as a district school for pupils residing within a limited geographical area. Information and publicity relating to the school is sent to about 20 different elementary schools within reasonable distance. Those pupils whose parents are interested in transferring to the new school are invited to call at the school's office and complete an application form.

The school was from the start specific in its vocational aim ; the new proposals in education for the 15-17 year olds are much more general in aim.

In the publicity material sent out by the school it is emphasized that the pupil and his parents should be prepared for another three years of schooling, and also for close co-operation between the school and the home. It is obvious that these procedures will result in the school obtaining a population which differs from that likely to be found in an average school. Most of the pupils and parents have, to some degree, been self-selected by the special act of application. But as there are more applicants than available places the school authorities engage in a further act of selection. The criteria employed are educational achievement, the interests of the pupils as expressed in their application forms and the estimate of their social characteristics. The particular social characteristics valued are initiative, self-confidence, co-operativeness and good behaviour. Now, although the Rektor and his staff attempt to establish a "normal" spread of pupil ability, interests and characteristics of the pupils are likely to lead to a predominantly middle class intake. Indeed, it should be noted that the decision to voluntarily continue education beyond the minimum age is more likely to appeal to middle class parents, and that the districts around Roedovre are predominantly middle class. The parents in those suburbs own their own houses or flats, have above average income, and are self employed or work in the major professions.

At present the teaching personnel consists of 18 teachers, including the administrative staff. The teachers are all graduates of colleges of education, and the majority have had several years' experience in teaching 8th to 10th form classes in ordinary schools, and many have previously taught in progressive or innovative schools. Throughout the early life of the school, however, the number of applicants for each vacant teaching post has been lower than might be expected, between 2 and 3 candidates for each vacancy. The apparent lack of keenness on the part of Danish teachers to work in the school can be explained by the fact that until recently teachers at the school lacked the security of tenure which is available elsewhere. Apart from the Rector and Educational Adviser all other teachers have been appointed on a temporary basis whilst on leave of absence from their previous school. Even though there has been very little staff turnover, and the great majority of the teachers appointed have stayed at the school, it does seem as though the contractual arrangements are perceived by the teaching profession as being relatively disadvantageous. At the time of writing, however, steps are being taken to ensure that the staff of the school will be offered a firm contract on full salary and also to encourage a greater number of university graduates to be employed.

At the time of appointment each teacher is issued with a statement setting out the special subjects and the area of general education in which he will work. This sort of specification is unusual in ordinary schools. The weekly number of lessons taught is 24, which is three less than the norm for Danish teachers. This number includes three hours' participation in a weekly conference of teachers, and in addition two hours are used each week for discussing pedagogical questions of general application. Finally, the teachers within each subject group use an additional hour for planning and preparing the teaching of a specific subject. For this work the teachers receive their normal salaries according to their experience, and a special fee for their participation in innovative work, planning conferences, and the writing of reports. At most times the teachers face classes of 24 pupils, and in each of the three years (8th, 9th and 10th grades) there are two parallel classes, giving a total number of 144 pupils.

An innovative school, even more than a conventional school, is likely to be very dependent on its relationships with outside organizations, It is important, therefore, to understand how the school at Roedovre works with both administrative and educational institutions in Denmark, and also its links with organizations and individuals from abroad.

Naturally, there is some disappointment amongst the staff that the original plans for the development of the Centre have not been fully implemented. It has been particularly difficult to co-ordinate all the different interests involved - the Centre, the Ministry, local private and municipal groups - and as a result long term planning has probably suffered and it has been difficult to obtain firm and precise decisions from the Ministry relating to the long term development of the Centre. Clearly this situation has only exacerbated the anxieties felt by the teachers concerning tenure. As one teacher commented, "if the authorities have any future plans for this school, they cannot do without the teachers". Indeed, the difficulties of the situation have been recognised by the professional associations of the teachers, and it is largely as a result of their pressure that the improvements in tenure noted earlier have been introduced.

Nevertheless, though the Ministry might have doubts about the long term developments at Roedovre, the teachers agree that the school is being generously supplied with educational equipment and aids. The senior staff responsible for organizing the financial affairs of the school claim that the funds available are "sufficient and reasonable". Moreover, the senior staff have a relatively free hand in spending the grants provided and this whole area of relationships with the authorities is relatively free of problems.

Obviously an innovative school might be expected to have close contacts with the Danish Institute for Educational Research and the Royal Danish School of Educational Studies. The former is a research institute whilst the latter is responsible for postgraduate studies, in-service training for teachers working in the "folkeskole", and the dissemination and adaptation of research findings for the benefit of the wider audience of teachers. Though the Supervisory Board of the Centre should ensure, in a formal fashion, easy lines of communication to both of the university institutions the connections have never been developed to the extent of providing a general exchange of experiences or a thorough support of the Centre and its activities. Such contacts as have been developed have been established largely through the Rektor's personal acquaintance with the staff of the higher institutions.

Indeed, other than informal and personal contacts with the research institutes, the school's relationships with other educational organizations in Denmark are not great and consist largely of the formal submission of reports and syllabuses to such groups as the Ministry Directorate. The pattern of informal contacts is repeated in the school's relationships with teachers in other schools. Contacts in this area are quite extensive, being mainly through visits and visitors, membership of subject study groups and lecture tours. Nevertheless, all the teachers find the arduous nature of their innovative work prevents them from making as many outside contacts as they would wish; as the Rektor points out, "pressure of work has prevented teachers spending sufficient time on public relations work, but under the circumstances we have done our best to spread information about our work and endeavoured to have our viewpoints accepted".

The teachers at Roedovre are, of course, interested in innovation taking place outside Denmark. Thus, at the time of writing, one teacher is in the USA for a year studying the application of technical aids to teachingand another is in Norway looking at school counselling and guidance schemes. Similarly visits by members of staff have been paid to Sweden and Great Britain and the Rektor and Educational Adviser both participated in the 1967-8 Berlin Conference on individualisation. At the same time visitors from overseas are encouraged to come to the Centre, and McMullen,the Warden of Countesthorpe College,and Trump , the American advocate of team teaching, have both been at Roedovre for short visits during the last year. The main problem, however, remains establishing lasting links with overseas individuals and organizations. Too frequently contacts are enthusiastic but brief, and do not result in real contributions being made to the overall development and comparison of innovative procedures.

This discussion of the school in its context has examined the establishment of the new school at Roedovre, and has charted the life of the school in terms of the recruitment of pupils and staff, the important relationships with the central Directorate and the Ministry, and the links which the school has with developments in the Danish educational system and elsewhere. It is now necessary to study the operation of the school in more detail.

Chapter I

THE ADMINISTRATION AND GOVERNMENT OF THE SCHOOL

The Act establishing the Innovative Centre stipulated that a supervisory board should be appointed. This Board , composed of groups representing the "folkeskole", industry, commerce, parents, educational authorities, and scientific and pedagogical institutions,acts as the agent of the community in ensuring that the intentions behind the establishment of the Centre are adhered to.

The large Supervisory Board has elected, from its own members, an administrative committee which meets every two months to discuss items presented to it by the senior staff of the school. In this way the Board is able to follow the work of the school, though it does not function as a controlling agency, and the senior staff have a large measure of freedom with regard to what policies and programmes will be introduced in the school.

The responsible administrative head of the Centre is the Rektor, Mr J Egedal Poulsen. Mr Poulsen is primarily a psychologist who has a great deal of experience of the kind of problems which the Roedovre school is handling. He has worked as a teacher for a number of years in primary schools and was the psychologist at the Experimental School in Copenhagen where he developed his special interest in school leavers and vocational guidance. In 1963 Mr Poulsen was appointed adviser to the ministerial working party considering plans for the innovative centre, and in 1965 he was appointed to the Rektorship of the newly established school.

In 1964 an Educational Adviser was attached to the Centre to assist the Rektor in the long term planning and to serve as deputy during the Rektor's absence. These two senior members have now been joined by the Principal of the school. The Principal is responsible for the daily routine of the school and for immediate executive action. Together the Rektor, Educational Adviser and Principal make up the senior staff, and have weekly meetings to discuss the policies and problems relating to the Centre.

In addition the senior staff are expected to consult with the weekly teachers' conference on general matters relating to the administration of the school. The main purpose of the teachers' conference, however, is to discuss the opinions of subject groups or individual teachers on the development of their programmes and their requirements for equipment. At these meetings, also,correspondence with the Ministry is discussed.

The weekly conference of teachers is just one aspect of a fairly extensive staff democracy. Whilst all decisions are finally in the hands of the Rektor, he makes wide reference to the opinions of the teachers. In this context, it should be noted that the responsibility of the Principal is strictly limited. His main tasks concern the daily routine of the school and the execution of decisions made at the teachers' conferences or meetings of senior staff. In addition to the weekly meetings already described there are arrangements for other sectional conferences. Thus, there is a Pupil-Principal Conference consisting of 2 pupils from each class and the principal of the school ; the Employees' Conference, made up of the senior staff and the technical personnel ; and the School Meeting, which is for the entire school.

In many ways it is the Teachers' Conference which is the most significant in bringing about change in the work of the school, and which is therefore worthy of closer examination. As already indicated the weekly two hour teachers' conference is the forum for internal discussions of day to day problems, and long term planning on matters of policy. It is primarily intended as a conference which will lead to an exchange of information bringing about agreed decisions. The meetings and agenda are planned by a small committee consisting of the Rektor, the Educational Adviser and two teachers. The committee bases its work on questionnaires answered by the teachers and on problems passed on from the meetings of senior staff. Whenever necessary working papers are prepared so that all teachers have a full range of information available. The items which come up at these important meetings relate to the overall curriculum of the school, specific syllabus problems or extra-curricular activities, and the usual pattern of work is as follows :

a) the problem is submitted with some suggested solutions
b) the suggestions are discussed in groups
c) the groups report on their work
d) a full discussion is held, the suggestions are debated and a solution is agreed.

Clearly the teachers' conference is a vital agent in the innovative work of the school - and it should be noted that its significance is marked by the fact that attendance is both compulsory and paid.

It is, of course, vitally important that decisions made at the Teachers' Conference are translated into action. This stage of the administration is limited to the teachers' subject groups. The groups were established at the time of the appointment of the first teachers to the Centre, and since then have been functional units in the school's innovative work. The teachers normally teach two subjects, but their administrative responsibilities and duties relate to one only. As can be seen the Teachers' Conference and the work in subject groups should formally occupy the teachers for about three hours each week. In practice however, most teachers spend more time on these activities which are so vital to the overall work of the school.

The formal administrative structure, however, must be looked at in terms of the balance of power in the school and the way in which the system of informal relationships serves to moderate the operation of the formal structure. When this is done it is clear that the three senior staff exercise a great deal of effective power, and that the authority of the Rektor is dominant. It is the Rektor and his associates who decide what problems are to be dealt with, as he clearly recognises, "Initiatives are often taken by me, and the agendas are mainly prepared by me ". *

The Rektor attempts to modify his authority by seeking out teacher opinion. He argues that he "gives high priority to his conversation with teachers", that many of the proposals which he takes up originate from other sources, and that there is a full and frank communication between the Rektor and the teachers. On the other hand, important financial decisions are taken by the Rektor and the other two senior staff, and as the Rektor argues "very often we take the decisive initiative - setting forth the ideas - the idea in question may be submitted to the teachers for discussion in the form of an exactly worked out plan. Amendments, if any, are considered and incorporated, or objections may be countered."

When the detailed discussion of the methods for operationalising policy decisions are conducted in the subject groups the senior staff give full assistance. They are especially responsible for giving reference to relevant reports and research literature, and working out notes containing descriptions of experimental methods and analyses in order that the teachers may become used to working with such tools. Within the subject groups it is even possible that the Rektor will, on request, work out an overall framework for a solution to a particular problem, which the teachers will then evaluate with regard to its professional relevance. The Educational Adviser might possibly be involved in the frequent discussions necessary for working out a report, and will be finally responsible for its publication. The significance of these activities must be seen in the light of the fact that a number of internal reports have already been written which, variously, summarise the year's work within each of the subject groups,

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* 'Me' = the senior staff members.

or define tasks to be carried out. Such reports with titles like "Viewpoints - Guidelines for Teaching", "Introductory Remarks for Discussions Regarding an Experimental Plan", have, in the end, been written by the Rektor.

It is clear, therefore, that the Rektor is very much at the head of affairs, and that his leadership is an important factor in inspiring and initiating change. Moreover, the teachers apparently consider it an advantage to have the pedagogical and psychological support of the Rektor and the senior staff. As one put it, "we value the ever available possibility for consultations and responsiveness to a desire to discuss problems". The teachers also welcome the opportunity to receive recognition for the work they have done. Though the teachers are occasionally upset when the line of communication becomes uncertain or "blurred", they do not perceive the senior staff as a directing group. Thus, during discussions with teachers no indication was given that they "wish to change the established division of responsibilities". The following answers show clearly the high degree of teacher satisfaction with the nature of the co-operation available from senior staff, "Very good" - 11, "Good" - 4. There were no responses from teachers indicating dissatisfaction. Similarly, teachers' evaluation of the administrative functioning of the school yielded the following results.

"Very good" - 5 "Good" - 9 "Fairly good" - 1

In discussion, some minor complaints are made by the teachers. Thus, some would like greater access to research material and theoretical literature relating to their work and more opportunity to discuss this data with senior staff. On the other hand, all recognise that the Rektor, the Educational Adviser and the Principal have many obligations and are very pressed for time. Most teachers recognise, therefore, that the present type of leadership, whilst not as completely democratic as would appear from an examination of the formal arrangements, is favourable to the context of innovation at the school.

Similarly, the teachers are generally satisfied with the Teachers' Conference. They value the opportunity for joint discussion and decision making, and the possibilities inherent in the co-ordination of the tasks of different subject groups. At the same time, however, the teachers recognise that the Conference can too readily develop an overwhelming concern with high level generalities "without relevance to the tasks at hand". The teachers believe that this is because they are bound to be discussing problems which are not easily resolved and that firm conclusions for action are difficult to reach. Consequently, there is a tendency for discussions to be conducted at the level of principle and detailed planning is left to the few staff who are immediately affected.

Overall, however, there is a high degree of staff satisfaction with the modified democracy of the school administration. It is seen as contributing to the innovative atmosphere of the school and also to the professional standing of the teachers.

Chapter II

AIMS AND PRACTICES

In order to ascertain fully the goals of those who work in the school and the nature of the innovations adopted questionnaires were sent to all teachers and senior staff, all teachers were interviewed and questionnaires were completed by a sample of the pupils. In addition information was collected by close study of the reports on staff planning and by participant observation at meetings of teachers and in the school generally.

In the initial period of the life of the school (1966-1968) the teachers seem to have been especially concerned with arranging their aims and priorities within the different school subjects. In this area the teachers were particularly concerned with examining the school subjects with reference to what they perceived as the later demands to be made upon the pupils. At this stage, those who were at the school were very conscious of its origins in respect of vocational training, and were anxious to establish a connection between the school's highest level of teaching and a broad selection of vocational training programmes. In the earliest years of the school's existence the aims of work associated with linking the ordinary school work with vocational training in office skills, nursing, metal and woodcrafts etc. were very important. More recently, however, it is possible to detect a move away from strictly vocational goals to those more concerned with liberal and general education. Nevertheless, in terms of the everyday work of pupils the teachers continue to emphasize the need for personal involvement and activities, and for the pupils to exercise control and choice in their work.

The innovative nature of the early attempts to develop new syllabuses can be found in the archives of the school. Thus there are titles like, "Aims, content and methods of instruction in Danish", "Workshop instruction - its aims as related to development in education". The titles signify the way in which the groups worked in order to establish aims for their subjects - thorough analysis of subject area followed up by practical planning. Furthermore, such an approach enables newly appointed teachers, who have no experience of experimental work, to participate in discussions and to consider the nature of their subject.

In general terms, the teachers see their aims in relation to the unique positions of the Roedovre school in the Danish educational system. They recognise that some of their goals must be connected with the need to conduct and evaluate experiments which can be reproduced in other schools, and that in order to do this they must attempt to provide facilities for all teachers who teach 14 - 17 year old pupils. Moreover, the staff at Roedovre are convinced that there is an important contribution to be made in terms of vocational training and guidance.

Nevertheless, these general goals have been modified in the operation of the school, and most of the teachers recognise the problems involved in operationalising the long term, global objectives in their day to day teaching. Furthermore, many teachers admit that other generalised objectives influence their work in the school. Thus, they are keen to establish the viability and value of the comprehensive school, and, also, to establish the importance of individual work as an important innovation. As one teacher notes, they are keen "that decisive emphasis should be placed on individual self-instructing and preferably self-controlling material ... in order to develop the pupil's aptitudes and interests".

In the six years of the school, therefore, individualisation of work has developed as a key process. The Educational Adviser and the Rektor became impressed with the importance of individualisation through their many international contacts, particularly those in Sweden and the United States. Moreover, the concept was seen by the teachers to be especially relevant to their general belief of making allowances for the individual interests and aptitudes of each child. Finally, over the last two years, as the interests of the senior staff and teachers have shifted to a greater concern with liberal and general education, individualised instruction has come to be seen as a means of coping with problems arising from joint or inter-disciplinary study, and from teaching mixed ability classes.

The individualisation operates in several ways, and in turn, involves other forms of educational innovation. For the 8th year pupils a rotation system has been established, which makes it possible for all pupils to get acquainted with all the optional subjects offered by the school. Furthermore, the rotation system offers pupils the opportunity to relate their own interests and abilities to the requirements of the different subject areas. The pupils' choice, however, is carefully regulated, as after each optional period they must prepare an account of what is being offered, and of their own reactions to it. This material then forms the basis of the counsellor's subsequent interview with the pupil concerning his choice of subject.

Within all subjects and subject groups (Danish, Mathematics/arithmetic, German, English, Natural Sciences) the teachers organize a variety of options composed mainly of self-instructing material, the pacing of which is largely under the control of the pupil. Moreover, the individualised material covers both specific topics such as "punctuation", and has the usual wide scope in a subject like modern language instruction, where there are a variety of "aids" and "packages" available.

Within the overall subjects the teaching methods vary but the general pattern involves some basic or common core supported individual tasks and "follow-up" courses intended to give the pupils a chance to acquire a certain amount of theoretical knowledge and practice which he can use to pursue his independent work. Another, but closely related approach, involves a "learning phase" which is controlled by the teacher and the material which he makes available, and which is then followed by an "intensive phase". At this second stage the pupils work within the subject at the same task but to different levels of intensity depending on their abilities and interests. Finally, there is what is known as a "width phase" in which differently graduated application exercises, dependent on previously completed tasks, are given.

To a large degree these procedures reflect the fundamental model of the Swedish Individualised Mathematics Instruction material. It is supplemented at Roedovre, however, by a large number of group activities. Seen from the point of view of the pupil this model informs the whole period of schooling, and provides the opportunity to develop and exercise responsibility in the making of choices and decisions.

More recently (from about 1970) the work of the school has also included a wide variety of smaller projects largely associated with testing and evaluating the pupils' achievements, and also with testing materials developed in the school. Work in this direction has covered a number of fields - teachers' assessment ratings, needlework, materials for physics teaching, domestic science. Because of its recent origins not all of this work is, as yet, fully developed. Nevertheless it does suggest that the staff of the school are still concerned with the essential problems involved in the relationships between aims, content and achievement. More particularly it is possible to suggest that the re-activation of this concern has been sponsored by other proposals which have brought about unstreamed classes, this change having been defined by the teachers as especially problematical in mathematics, foreign languages and natural science where the teachers have been used to working almost exclusively with the most able pupils.

As a response to these radical changes in organization the staff have been experimenting with major alterations in the time-table, and the introduction of what are known as "instruction modules". Essentially, these are short but concentrated lessons of about 20 minutes' duration. After lengthy discussion the implementation of the instruction modules has become a joint project for all teachers in the session 1970-71. Indeed, as the module project has affected all the teachers and pupils, and as it involved the decision making processes which have already been described it will be advantageous to look at the development of the whole project as an important illustration of the working of the school. The choice of this project for special discussion can be justified by its immediacy and by the unique opportunity presented to the researcher of observing the significant processes and decisions at first hand.

The basic idea behind the module project is that the normal weekly time-table of 30 lessons is converted into 50 modules of about 20 - 30 minutes each. It is believed by advocates of the system that the shorter lessons will be more productive and lead to greater pupil learning, especially in the academic subjects. Moreover, this will not be to the disadvantage of the practical subjects as more than one modu' can be put together to form a lesson. In addition, it is argued that the module project will enhance the "possibilities present for benefiting from a better placement of the optional subjects", as more instructional units are obtained to be used for the weekly time-table of the pupil, and the more flexible the time-table, it is finally argued, the more individualised learning will be facilitated.

Plans for a re-organization of the time-table have been under discussion for some time, and the Rektor and the Educational Adviser have both explored the possibilities inherent in a more flexible system, particularly as a result of a visit to Bremen. The teaching staff was informed orally and in writing concerning the possibilities of a new system of time-table arrangements. Despite an apparent interest the staff took no specific action. At this stage the originally appointed teachers were still defining aims and tasks relevant to each subject and could probably not find time to consider far reaching proposals for organizational change. Time-table factors were nevertheless considered occasionally by the teachers, and on one occasion a member of staff, encouraged by a report in a Norwegian Educational Journal, attempted to introduce longer working units. The general direction of the teachers' thinking on the matter remained, however, towards shorter units. These views were supported by Trump, the American team teaching expert, on a visit to Roedovre.

At the time of all this uncertainty the national government introduced a new law relating to the "Folkeskole" which meant that a 5-day week was to be established in schools. Consequently, there would have to be either over-crowding of subjects or a reduction in the number of lessons in some subjects. Faced with this new situation the Rektor, the Principal and the Educational Adviser presented to the staff, in the autumn of 1969, their module project. They argued that they "considered it their duty to discuss thoroughly the framework according to which a comprehensive school might work . . . how this framework might be built up to allow for the possibilities for individualised work . . . and at the same time to allow for the social development of the pupil". After a discussion of the potential problems of the programme, a number of working tasks for the teaching staff were established.

Each subject group discussed the module project and the implications of shorter periods and then reported to the teachers' conference, where the senior staff took note of all the likely difficulties. Gradually agreement amongst all the teaching groups was obtained and the proposals for the more flexible organization of instruction was submitted to the supervisory board of the school and to the Ministry.

The Ministry studied the new scheme for some time as they were particularly concerned about certain principles relating to teachers' pay as a result of the move from lessons of 50 minutes to those of 30 minutes. In the end full approval did not come until June 1970, which was late in the academic year, and the full realization of the project was therefore postponed until 1971-72, this decision being taken by the teachers. Nevertheless, the agreed decision to delay did not end the problems associated with the proposals. It is important to note that the policy of shorter lesson periods carried with it certain wider implications concerning optional subjects, choice, and individualized learning. The result of the delay, therefore, has been to continue the general educational debate amongst the staff. Four main issues were difficult to resolve. :

i) Exactly how long should each module last ?
ii) How many modules should be allocated to each subject ?
iii) How many modules should be used just to present the subjects to the pupils as a basis for their choice ?
iv) How much free choice should pupils be allowed ?

In the end, however, sufficient agreement has been reached for the project to go ahead. The Rektor has taken a careful interest in the whole debate and effectively moderated between staff, as a result of which work plans have been devised for the next 3 years.

This brief digression into the origins and development of the module project has served to illustrate important features of the innovative process at Roedovre ; the power of the senior staff in initiating proposals is restricted by their dependence upon the democratic procedures established amongst the teachers. At the same time it is important to note that the legitimate interest of the separate subjects can be maintained through the subject groups, also that the Rektor has an important mediating role to play when differences between staff become extreme. In order to facilitate the progress of the scheme certain members of staff have visited Goteborg, where similar arrangements are already in operation, whilst the senior staff have taken care to arrange for all the relevant literature to be made available to the staff. Inevitably, some teachers have carried a heavier load, and felt more responsible for the new ideas than others. Nevertheless, about half of the teachers have been actively engaged in carrying through the project and the others have given their tacit support.

At the same time it is possible to point to conditions which have proved to be problematical and difficult in operationalising the proposals. On the basis of observation, it can be argued that the module project was designed too much as a solution to a technical, time-table problem without a clear understanding of the latent consequences involved in its adoption. As a result some teachers never came to understand the full complexities of what was involved and the possible effects and unintended consequences were never fully pursued. Thus, not all these teachers were able to perform efficiently ; a situation which was not helped by the apparent failure to involve anyone with expert knowledge from outside the school. Finally, it can be noted that no systematic arrangements have been made for evaluation, and that the democratic procedures at no time involved a discussion with the pupils.

This overall survey of the activities of the school shows that, in the main, there has been a common line in the progress. Apart from marginal differences due to differences between subjects the teaching arrangements have consisted broadly of Discussion, Group Work and Individualized Learning. It is also clear that throughout the school the last named stage is regarded by the teachers as being of great importance; as one teacher put it, "consideration relating to the individual pupil are vital. Each pupil should be given the chance to go as far as possible". The teachers believe that this will only be possible through increased differentiation and individualisation of instruction. Since 1969, this policy has been emphasized by allowing for joint study of certain subjects by pupils of the same age whether they are enrolled in the general stream or in the examination stream.

The development of "individualisation" as a key concept for the work of the school can be associated with the realization on the part of the teachers that the pupils in the school had very mixed interests and abilities, and also, with the general educational debate in Denmark. In this debate the most generally accepted conclusions have related to the postponement of specialisation in schools and the need to offer to pupils the opportunity to develop their own special abilities. Moreover, the international contacts of the Rektor and the Educational Adviser encouraged them to believe that general courses accompanied by individualisation were the best means of making the teaching efficient for each pupil. Thus, though there had been some support for individualisation from the school's foundation it became fully developed after 1969 when de-streaming and inter-disciplinary study were widely introduced.

Finally, in this section, some evidence relating to the work within subjects must be considered. Within the various projects content problems are decided upon either in the subject group or by the teacher in question, though they have to take account of any relevant general decisions concerning aims and methods which have been made by the whole staff. Decisions regarding subject content tend to follow the advice which is suggested for each subject in the centrally published Teaching Manual. Again, much use is made of Danish text books which have been based on the Teaching Manuals for each subject, particular attention being paid to the relevant exercises. As supplementary material, foreign materials and programmes are used. Thus in different projects Swedish, German and American materials are employed, whilst there is also use of the Nuffield publications from England. On occasions, however, such material is modified for use at Roedovre. In some cases, also,the work in the subject group has been extended to include teachers outside the Centre, but it has proved difficult to involve and administer such supplementary, subsidiary groups.

This lengthy description of the aims and practices of the school at Roedovre illustrates well both the diverse nature and source of innovation, and the importance of the administrative structure at the school. Sponsorship of new ideas may have international origins, it may come from the continuing and general debate about the future of Danish education, or it may come from the initiative of enthusiastic teachers. Whatever the source, however, the innovative process has to be articulated with the existing structure of the school at Roedovre, and especially with the authority of those who control it. In this way the actions and attitudes of the Rektor are decisive, within the context of the established democratic procedures. Obviously, there are occasions when the expectations of the significant participants are not met, and when proposals do not work as planned At these times the staff, the pupils and the parents might come to feel frustrated and thwarted. It is vital, therefore, to understand the restrictions and constraints which surround the personalities and the procedures involved in the innovations.

Chapter III

PRACTICE AND PROBLEMS

In order to understand more fully the practice of innovation at Roedovre interviews were conducted with all the teachers, and they were also invited to complete a questionnaire concerning their attitudes to the work and progress of the school. Similarly the senior staff were invited to complete a questionnaire, as were the pupils of the school. At the same time the researcher attended regularly at the weekly conference of teachers. By these methods it has been possible to grasp the kinds of difficulties and problems which have emerged as innovation has been introduced, and, also, to assess the degrees of satisfaction felt by those engaged in the new practices.

Owing to the shortage of time it was impossible to question parents closely about their views of the school. Nevertheless it has been possible to construct some evidence of their opinions utilising secondary material. In general, the teachers are confident that the parents support the school and its major innovations.In a sense, however, this is only to be expected,as the parents have chosen voluntarily to send their children to the school. Moreover, the teachers and senior staff keep the parents well informed of development and changes within the school. Nevertheless, in meetings with teachers the parents have expressed certain anxieties concerning the work of the pupils. In the main, the anxieties surround two areas. Parents seem uncertain about the benefits to be obtained from unstreamed classes, and they also express concern that the pupils of Roedovre may not be able to meet the demands of the national public examinations. In the main, however, the doubts of the parents have no recognised channel of expression and their diffuse positive commitment to the general aims of the school remains unchallenged.

The parents are organized in a very active parents' association. Regular meetings are held and there are frequent discussions with teachers concerning the plans and working methods of the school. When major alterations, like the Module Project, are proposed the parents are informed directly by the senior staff, otherwise the form master is responsible for keeping parents informed on a day-to-day basis. Teachers in the school frequently talk of "pupil-teacher-parent triangle", and discuss methods by which the relationships might be strengthened. They point out that parents "support our efforts", and that "they will come when asked to". On the other hand, it is important to recognise that the dialogue between the school and the parents is characterized by the initiative coming from the school and the teachers. One teacher noted, "It is hardly possible for the parents to give a general criticism of the school. Their participation in the projects of the school is insignificant".

In the enquiry the pupils were invited to comment on their perceptions of the teachers' aims, and also to discuss their own views on the operation of the school. It is interesting to note the overall emphasis which the children give in their perceptions of the goals of the staff - "Learn to work independently and in groups , have or obtain good fellowship, co-operation, personal initiative, independence,occupational success, good examination results". The marked emphasis on the expressive rather than the instrumental functions of the school is clear. Nevertheless, the pupils appear to accept the teachers' perspectives. As a result the teachers face very few problems of control. The occasional outbursts of misbehaviour or failure to work can be dealt with by individual teachers or the Rektor. Suspension for a limited period can be used as a punishment, and, on rare occasions pupils have been expelled. It should be noted, however, that the pupils have voluntarily chosen to stay beyond the minimum school leaving age, that they and their parents have specially opted for the school at Roedovre and have been carefully selected by the senior staff ; that the pupils are predominantly middle class with their parents making a direct contribution to their education. Under these conditions it would be surprising if the pupils presented great problems of control and motivation. In the main, therefore, pupils' difficulties are resolved through counselling and discussion. The teachers all agree that the "climate" of relationships between pupils and teachers is better at Roedovre than in other Danish schools.

Despite the general satisfaction of the teachers with the social climate of the school it is important to recognise that the teachers do feel certain restrictions and constraints upon their work at the school. In turn, these restrictions give rise to varying degrees of dissatisfaction. In order to understand the operation of the school, therefore, it is important to examine the constraints and the operational problems facing the school, and the nature of dissatisfactions to which they give rise.

Many teachers are uneasy about their relationships with the Directorate in the Ministry of Education. The Ministry has its own subject advisers who the teachers feel are insufficiently informed or interested in "what is going on at the experimental school". The teachers feel, therefore, that the Directorate exercises a certain constraining influence. In this respect the teachers persistently emphasize the restrictive nature of the national regulations for examinations. In general, the teachers argue that innovation in education within any particular subject is checked or limited by the restrictions caused by the yearly examination. Repeatedly this view is expressed by the teachers, but all have had to surrender to the demand for examinations. Yet the situation is more complicated than might appear. The teachers recognise that they wish to make their real impact not only at Roedovre but at the more conventionally organized schools. In order to do this, however, they must, to some degree, make their case according to the conventional criteria for success. The teachers, therefore, have found it difficult to resolve this dichotomous situation, and remain uneasy with it. Essentially, they regard the conventional criteria of examination success embodied in examinations as restrictive, yet the teachers are desperately anxious not to become curious isolates within the wider educational system, which they still hope to reform.

It should be pointed out, however, that the officials from the Directorate and the Ministry when questioned about their attitudes to Roedovre claimed to be fully in support of the experimental work of the school. They were even anxious to stress their liberalism beyond the limit allowed by the official regulations.

In the same way as the teachers appear anxious about the external criteria for success they also indicate that they are worried about the lack of contact with relevant outside bodies,particularly insofar as such bodies might provide assessment and evaluation of the work of the school. The formal arrangements for organizing the school attempt to ensure that the Supervisory Board maintains lines of communication to the Danish Institute for Educational Research, the Royal Danish School of Educational Studies and other relevant professional bodies. In fact, these connections have never been developed to the extent of providing a general exchange of experiences or a thorough support of the Centre and its activities.

Such contact as has been established has been achieved largely through the personal contacts of the Rektor. Nevertheless, all the teachers at Roedovre expressed a strong desire for more co-operation with outside educational bodies, especially as they anticipated that such contact would assist them in planning their work, and above all, in evaluating it. The situation was well described by the Rektor, "We do have contacts with the Royal Danish School of Educational Studies through the Supervisory Board - and now and then in connection with courses organized by this institution . . . We have also had some contacts with the Danish Institute for Educational Research, but in all cases the lines of communication have never been developed."

There is, therefore, a gap between the work of the Centre and the higher institutes of education in Denmark. One teacher notes that, "Towards the Royal Danish School of Educational Studies we have probably traditionally been rather sceptical, and we find that there is a great distance between the actual situation in schools and the publications sent out by the Danish Institute of Educational Research". Though the teachers comfort themselves that lack of contact with such research organizations gives them freedom "to take up the problems we find important", they still resent the lack of evaluation and assessment of their work which such contact might provide. Finally, in this context, it should be emphasized that the Supervisory Board of the school which could exercise certain supervisory and governing functions observes the Danish tradition of leaving all initiatives to those who face the practical problems in the school ; their frequent meetings are for "listening and approving".

Linked with the teachers' uncertainties over evaluation and assessment is their concern about the large amount of work they have to do in order to publicise and diffuse the pedagogic arrangements at the school. As the Rektor points out, "pressure of work on the part of the teachers has prevented their spending sufficient time on public relations work, but under the circumstances we have done our best to spread information about our work and endeavoured to have our viewpoints accepted." The teachers believe that any progress made in spreading their views is due more to the isolated enthusiasm of other individuals or groups than to the external administrative conditions. In turn, this form of approval is very rewarding to the teachers, especially bearing in mind the absence of other sources of evaluation. As one teacher put it, "people lose heart if they do not receive at least some recognition from those concerned". Many teachers were of the opinion that the school might benefit from having a more definite relationship with the whole structure of the "folkeskole" and their administration. In this way the teachers would feel more confident that their reforms would be taken up in any future revision of the legislation governing the "folkeskole".

One section of the questionnaire given to teachers examined their commitment to and involvement in the work of the school and the principles upon which it was founded. It should be noted from the beginning that all the teachers were attracted to Roedovre by the opportunity of experiment and were dissatisfied with the traditional teaching arrangements in their previous schools. Answers to the enquiry showed that all the teachers in the school knew, and could recall, the four goals of the school set out in the original enabling Bill of 1964. This may be taken as some measure of their commitment. In discussion, however, the teachers stressed the importance of preparing educational materials and individualising instruction. As one teacher argued, "decisive emphasis should be placed on individual, self - instructing and preferably self - controlling material ... in order to develop the pupils' aptitudes and interests." Moreover, although there is marked agreement amongst the teachers in respect of these goals, they admis that it is not always easy to operationalize them or keep them in mind in such a way that they inform the practical tasks. As one teacher noted, when asked whether the staff ever need reminding about the aims of the school, "Discussions concerning aims are held at staff seminars and in the subject groups, but they figure less at the full teachers' conferences. However, with groups of parents and pupils the answer is more difficult to give and there is less certainty that these important matters will be raised."

Nevertheless, when the teachers were asked to specify in the following diagram their own perceptions of their commitment to a project and their views of its success, the answers were overwhelmingly indicative of"active personal commitment" and "success in the project".

Personal Commitment Project	Active	Passive
Succeeded in Project		
Failed in Project		

Even allowing for the fact that this type of question is likely to encourage the respondents to give positive replies the complete absence of any forms of failure and/or withdrawal is worthy of note. Indeed, the overall impression, from a variety of sources, is that the teachers are satisfied with their appointments to the school and that the social climate within the school generally facilitates their work. Co-operation between the teachers is evaluated positively Discussions in the conferences and subject groups are characterized by their easy manner. Where there are marked divergences of opinion, as for example, in a discussion on the amount of free study time which should be available to pupils, most teachers seem prepared to look for and to accept compromise arrangements. Indeed, in this area of school management consensus is the norm. It would be a mistake to view this consensus as a lack of concern amongst the participants, for the teachers see it as a professional approach to their work, and an attitude in keeping with the overall goals established for the school.

In the subject groups fairly close co-operation is the rule, even though it is recognised that the types of decision made here do have important direct consequences for the individual teacher. A considerable degree of individual loyalty to the operation and execution of group decisions is therefore required when the teachers are working on their own. Professional attitudes to the task reduce friction but it is frequently the case in this area that not all disagreements disappear. Similarly, co-operation at the direct classroom level can be a source of strain. At this level the individual style of the teacher will be all important and differences can readily occur. Thus there can be disagreement over the question as to whether the pupils should be directly responsible for organising their own group work, or whether the main responsibility should remain with the teacher. Clearly, differences in perceived roles due to different personalities or different pedagogical standpoints have their consequences for practical work. Most of the teachers recognise this, but are nevertheless generally content with the arrangements. In answer to the question, "To what degree are you satisfied with the co-operation among teachers in the classes which you yourself teach ? " 10 out of the 18 teachers responded "Very well", or "Well".

The teachers feel, however, that their co-operation is essentially based on their own personalities and attitudes. They are less confident in arguing that this has led to a real development of inter-disciplinary work. Thus it was frequently pointed out that in the teacher's conference it is clear that the teachers of the more "well structured and traditionally established" subjects seem uncertain in understanding what the practical/creative group of teachers is able to offer. The teachers in this group are sensitive to the fact that they lack "knowledge of other teachers' areas of work". Moreover, the teachers recognise that the differences between the subjects become more marked the more closely that decisions have to be made to the practical teaching activity. Thus nominal inter-disciplinary co-operation is possible for the general educational purposes of the school, but it is difficult to find real integration at the classroom level.

A problem which the teachers are extremely anxious to discuss is the shortage of time for their work and the extreme pressure which the innovative situation places upon them. Thus, 8 of the staff are "not at all" satisfied with the work load placed upon them. As one teacher put it, "the pressure from within is more difficult to manage than the tasks imposed from without". Not only do the teachers have to perform their normal pedagogic tasks, but they are heavily involved in lengthy discussions at conferences and subject meetings, and above all, in the preparation of materials for teaching. One consequence of this pressure upon the teachers is that certain problems do not get referred to the democratic decision-making structure of the school, especially by the experienced teachers. Rather than create issues and a long debate some teachers inevitably by-pass the procedures by taking their own swift executive action. This is particularly the case when broad principles have been generally agreed, for many teachers feel that too much discussion of the practical details is a great waste of their time, and provides too many opportunities for those members of staff with forceful personalities to dominate the rest. Finally, it should be noted that for some teachers the pressure on time is particularly acute as they are members of several subject groups. These teachers, particularly, complain that the effect is disadvantageous to their overall work. They are subject to the constant demand for productivity, with little time to evaluate their experiences - "it is exciting and inspiring, but often hard and demanding work to be engaged in innovation."

More positively the teachers welcome the co-operative context of the school which they believe is completely different from other Danish schools. Materials, once prepared, are made available to all - a technique developed for the teaching of Danish has been successfully employed by the Mathematics staff. Such co-operation is regarded as important in maintaining the enthusiasm of the staff. Certainly, it is an important counterbalance to the new context in which many teachers find themselves, with unusual conditions of service and salary, uncertainty over their authority and new work tasks. Little wonder, therefore, that when the teachers were asked to rate their degree of satisfaction with the frankness of educational discussion, all responded in the "Very satisfactory" or "Satisfactory" categories.

Over the years of the school's existence, few projects can be said to have been complete failures. Most of the staff attribute the relatively high success rate to the careful "screening" process which is inevitable under the committee system, and also the position of the Rektor. As has already been shown the support and encouragement of the Rektor is vital to the success of any new proposals ; it is suggested by many teachers that the Rektor is, in fact, extremely cautious in sponsoring programmes of innovation, and that he will only take up new ideas after the most careful investigation.

It is clear from the discussion of the innovation in practice that there have been unintended consequences of many of the new ideas. The teachers recognise the much greater burdens placed upon them under the innovative schemes. Not only is their own authority more exposed, but they are made increasingly aware of their mutual dependence in maintaining the conditions under which their individuality can flourish. At the same time the teachers face particular problems deriving from the shortage of adequate teaching material for programmes based on individualised teaching. Consequently much of the effort of the teachers is involved in preparing their own material, or adapting that brought in from other countries. Such work is very exhausting and time-consuming, and at Roedovre the teachers face the additional burden of the frequent meetings and discussions.

A further problem to emerge from the earlier analysis is the ambiguous position of the Rektor and the other senior staff, the Principal and the Educational Adviser. Though the school is characterised by a formal set of democratic arrangements for the whole of the teaching staff, it is clear that the three senior staff occupy a significant position. Not only are they responsible for initiating many of the innovations which then are democratically discussed amongst the staff, but their support is vital to the success of any initiatives which come from the teachers. The staff democracy, therefore, is modified by a kind of benevolent despotism. It should be noted, however, that the majority of the staff approve of the arrangements and are generally supportive of the Rektor's position.

Finally, it should be noted that the school has found it difficult to ignore its links with the wider society, and that these links have to some degree acted as a constraint upon the innovation. The articulation of the requirements for formal academic success in terms of examination passes has clearly constrained the teachers and limited their plans in respect of such developments as destreaming and fully integrated curricula. It is interesting to note that the articulation of the anxieties in this direction have come not only from outside the school, through the Ministry and parents, but also from teachers inside.

This discussion of practice and problems, therefore, should serve to analyse and explain the innovative work at Roedovre, drawing attention to the operation of various new ideas in education and to the kind of consequences that have followed from them. It remains now to offer some general conclusions on the organization and work of the school.

CONCLUSION

Like other innovative schools Roedovre has enjoyed the benefits and suffered the disadvantages of its unique position within the overall educational system. Undoubtedly the school has gained from the initial support of the Ministry and the Minister who was responsible for its establishment. In particular, the money made available to the school is generally regarded as sufficient to meet the current requirements of the staff. On the other hand, the school has suffered because the capital grants for extra buildings have not been forthcoming and since the departure from office of the original Minister the initial plans for the long term development of the school have not been fulfilled. Thus, it has not been possible to establish the school as a residential centre nor to develop the links with comminities outside the school's immediate area. There is a sense, therefore, in which the original purposes for the establishment of the school have not been met, and the whole question of the school's relationships with outside organizations has remained uncertain and problematical.

The effects of this can be seen in several ways. In general terms the school has had little impact on other Danish educational establishments as there are no institutional arrangements for the transmission of the innovations. Most contacts have been of a personal kind and have been heavily dependent upon the initiative and enthusiasm of individual teachers. Equally, the school and its teachers have found it difficult to establish formal channels through which they can receive new ideas, helpful in the business of evaluating their own practices. As a result the teachers lack confidence in respect of their contacts with innovation taking place in other parts of the world, and rely on chance visits to the school by specialists from other countries and on their own, occasional, excursions to international conferences. The teachers look upon this as unsatisfactory because they feel that wider and more effective links would enable them to profit from the work of more experienced innovators elsewhere, and also that they could adopt the programmes and work of other countries for use in Denmark.

Similarly, despite the school's unique position in Danish education its links with the prestigious teacher training and research institutions are tenuous, and very dependent upon personal contact and the special knowledge of the Rektor. Again, the teachers are unsatisfied with this situation and believe that it hampers the effectiveness of the school. In particular, the staff of the school would welcome the opportunity for discussions with, and evaluation by, an independent research organization. Over and over again the questions of assessment, evaluation and "feedback" arise in conversations with the teachers. Such anxieties are common amongst all teachers, as the nature of the work task makes it extremely difficult to point to clear-cut results and achievements or to assess the teacher's contribution to a pupil's progress even if the measures of progress can be agreed upon. At Roedovre, as at all innovative schools, the anxieties of the teachers are especially acute. The use of new methods and pedagogic approaches, in particular those based on individualisation make it extremely difficult to apply the usual criteria for teacher success. At the same time the majority of teachers whose orientation is towards progressivism in education, reject the conventional measures of pupil(and hence, teacher) success embodied in the system of formal tests and examinations. Though the teachers are often unclear in their formulations of the ways in which contact with the Danish Institute for Educational Research and the Royal Danish School of Educational Studies will help their own work, they do feel that these higher institutions could serve to evaluate the innovative practices. In turn, the teachers argue that such scientific validation would enhance the prospects of the innovations becoming more systematically diffused.

Moreover, accurate assessment and evaluation would, if favourable, make it easier for the staff to escape the constraints which they feel derive from the need to impress parents and other teachers by achieving success in traditional and conventional terms. Indeed, the teachers remain concerned about the feelings of parents, even though the parents are generally supportive of the aims of the school. Nevertheless, the anxieties of the teachers do find some reflection in the parents' expressed hopes that the new teaching methods will not hinder the educational advance of their children measured in conventional terms.

The staff of the school are fortunate that they have not had to confront the implicit conflicts embodied in this situation. They have managed to avoid the worst of the potential problems because of two factors. Firstly, because the parents have especially elected to send their children to Roedovre and hence have an overall and generalised commitment to the aims and work of the school, which prevents them from articulating too severely any specific anxiety. Sectondly, the teachers have felt themselves constrained, under the influence of the Rektor, not to ignore the expectations of the parents in respect of formal academic achievement, and have, therefore, kept their innovations within the broad limits which allow the pupils to be taught by syllabuses and teaching manuals which apply to all Danish secondary schools.

In all their work the teachers recognise that the social climate at Roedovre is probably better than in most other Danish schools. Indeed, this is to be expected in view of the large degree of self-selection in the admission procedures of the school, and the predominantly professional and middle class characteristics of the great majority of the parents in the region of Roedovre. Problems of social control at the school, therefore, are not large, and can normally be dealt with by discussion and counselling. In this very direct sense, therefore, the teachers do not feel that the innovative work involves a challenge to their traditional authority.

On the other hand, they do feel that there are more subtle pressures upon them. The teachers recognise that methods based upon individualisation and a large degree of pupil initiative are likely to involve "open-ended" commitments on the part of the staff. Furthermore such pedagogic arrangements involve the teachers in the greater risk of "exposure" by the pupils and also in much more preparatory work. Consequently, the teachers at Roedovre do see themselves as being involved in a much greater amount of work than teachers in conventional schools, In addition, much of the staff time is taken up by the important meetings vital to the democratic nature of the school. Thus, the teachers at the school,as with others in innovative situations, do find that it is necessary to revise the implicit "effort bargain" which they might have made with their colleagues and the pupils. On those occasions when, owing to fatigue or lack of enthusiasm or competence, teachers fail to meet the new requirements, tension can arise within the staff.

It is probably for these reasons that the staff generally welcome the control and constraint which the Rektor exercises over the innovative process in the school. The Rektor is cautious when introducing new perspectives, and very anxious to be confident that innovation will be successful. To this end, therefore, he examines all proposals carefully and attempts to gain widespread support for any policy before it is adopted. One consequence of this is that the Rektor, and to a lesser extent the Principal and Educational Adviser, occupies a key position in the innovative process and the working groups of the staff take on the characteristics of executive and operational, rather than decision making bodies. This situation is reinforced by the greater freedom which the senior staff enjoy to explore educational developments both in Denmark and on an international front. Thus the Rektor and his senior associate are frequently the initiators of new ideas and methods. The leadership of the Rektor in this respect is not challenged by the staff and is generally regarded as fundamental to the innovative process at the school.

If, therefore, the school has not been as radically novel as a minority of the teachers would wish, its achievements should not be underestimated. One result is that the significance of counselling and vocational training in schools has been identified in the Danish educational systems and the school has served to focus attention upon new teaching methods. Some of these such as individualisation, have involved the preparation of materials which are now becoming available to a wider Danish audience. Moreover, the very process of innovation has increased awareness within the Danish educational system of developments in other countries, as shown, and many of the curricula activities at Roedovre have been based on earlier work in England, Sweden, Germany and the USA. In addition, the changes in the pedagogic arrangements of the school represent major innovations in respect of the wider educational structure. The development of the module programme, inter-disciplinary work and non-streaming can be looked upon as significant developments in the context of the whole system

For the future, the school and its staff would seem to be concerned with two not unrelated issues. Firstly, there is the question of the degree to which a genuinely innovative position can be maintained in respect of vocational training. Already there are signs that more concern is being shown for a traditional "liberal" education, albeit conducted by means of progessive techniques. Such an education provides the pupils with greater academic opportunities as they progress through the upper parts of the Danish educational system and, hence, is more in keeping with the wishes of the parents. Secondly, there is the problem of the extent to which the innovations developed at Roedovre can be established elsewhere, a question which is not totally in the hands of those who work at the school. Much will depend on the evaluation of the innovations and on the support of the central educational institutions in Denmark.

Part Five

TAPIOLAN SCHOOL, TAPIOLA, FINLAND

by

Lyyli Virtanen

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Chapter I

ADMINISTRATIVE AND HISTORICAL CONTEXT OF TAPIOLAN YHTEISKOULU

Tapiolan Yhteiskoulu is situated seven kilometres (4.5 miles) west of Helsinki, Finland's capital. Administratively, this area belongs to the Borough of Espoo. The population of the city of Helsinki is about 500,000 and Tapiola forms a complete small town with a population of about 20.000 outside the boundaries of the city of Helsinki. The town was created in the early 1950s as a completely new establishment on the outskirts of the Finnish capital. From the beginning it was the policy of the planners to consciously design the town according to the most modern principles of development in order to provide the maximum convenience and attractiveness for the inhabitants. Heikki von Herzen, who was largely responsible for providing the initiative for the foundation of Tapiola, has described the ideas and policies he and his team adopted :

"The planning and building of Tapiola began twelve years ago, in 1952, under the most extraordinary circumstances. Through the initiative of six large social organizations, Asuntosäätiö The Housing Foundation, was founded. It is a private, non-profit making enterprise that without the support or help of the state or local authorities began to build a complete town in virgin country and, in this particular way, wanted to try and show that there were ways and means of planning and building modern communities using new methods. The starting point in the planning of Tapiola was the all-important aim of creating the right surroundings for the town dweller. This basic aim - creating a milieu that would be both socially and biologically correct, - was to be realized consistently and all other planning was to be related to it. We wanted to build a town that was dedicated to man and his homelife, his leisure and his recreation. Children and young people were to have good and safe surroundings in which to grow up. Traffic was not to predominate ; it was to submit to restrictions and it was only to serve the inhabitants. We realized that if we wanted to achieve these aims we should not let the density of population grow unreasonably. The maximum was set at 26 people per acre and that meant that the planned area of 600 acres could house 17, 000 people. Another of the leading principles in the planning of Tapiola has been the consistent placing of multi-storey buildings alternately with low buildings. These two different ways of building benefit each other and make it possible to create an urban milieu, an urban environment with humanity, variety and beauty."

The idea of Tapiolan Yhteiskoulu also originated from Heikki von Herzen. The plan of Tapiola allowed for different schools to be located within the area. Right in the centre of Tapiola there was a site reserved for a secondary school. Towards the end of 1955 Heikki von Herzen called a meeting of a committee to found the secondary school. He chose people who were interested in educational affairs and also those who already had some experience of working in service organizations.

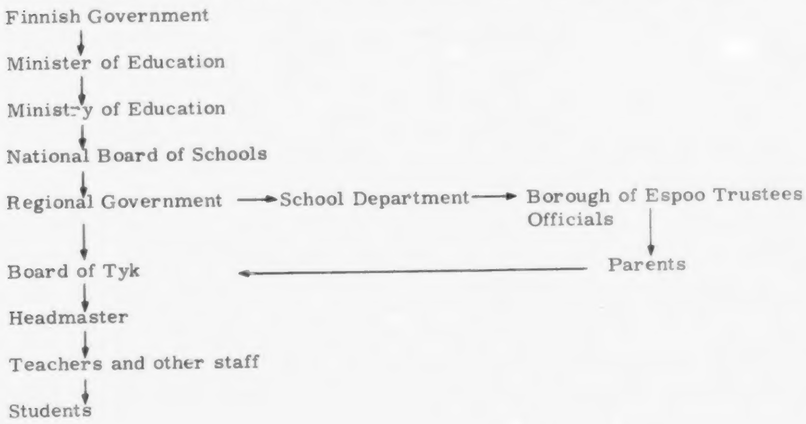
Eventually, the school began its activities in temporary facilities in the autumn of 1956 as a branch department of a school in Helsinki. In the autumn of 1958 it became fully independent and was given the name Tapiolan Yhteiskoulu. As the name is so long, the abbreviation Tyk will be used for the rest of the study.

Given the voluntary nature of the school, the lay administrators involved in its planning and establishment were in a strong position to influence the school's development and academic organization. That Tyk has become a widely known experimental and innovative school whose objectives and curriculum differ considerably from those of other Finnish secondary schools is largely due to the influence of three of the early school administrators who quickly established themselves as a significant working team. The group consisted of Mr. Yrjo Riikonen, a lawyer who was the Administrative Director of the Housing Foundation, Mr. Urpo Ratia, an engineer and local businessman who was, from the beginning, a member of the committee planning the new school building, and who later became Chairman of the School Board (Mr. Ratia has travelled widely in the United States of America and had made special studies of American methods of management and school administration. Whilst in the United States he wrote regularly to Mr. Riikonen expressing his ideas reflecting on his American experience. When he returned to Finland Mr. Ratia was determined to establish Tyk as an innovative school and his policies and personality have played a leading part in the life of the school.) and the third member of the team, Mr Tauno Kajatsalo, who began as a teacher of mathematics at the school, but upon its independence was appointed the first headmaster. In most respects Mr. Kajatsalo accepted the ideas of Mr. Ratia, and also he had excellent relationships with the National Board of Schools and Mr. Haahtela, a leading school administrator. This team of three, therefore, was responsible for planning the building of the school, and for making Tyk different from other Finnish secondary schools.

When the Tapiolan Yhteiskoulu was being founded in the 1950s, Finnish schools still followed the selective school system that had been stabilized in the whole of Scandinavia as early as the 19th century. This included an 8-year obligatory primary school. Children showing academic ability could move from the fourth grade of the primary school to a secondary school. The secondary school is composed of a five-year junior secondary school (middle school) and a three-year senior secondary school (gymnasium). Since the Second World War the Scandinavian countries have modified this selective school system and introduced the comprehensive school system. Finland is only now changing her system in the 1970's, and all children go to the same basic school for nine years.

Tyk is a secondary school of the old type with a five year junior secondary school and a three year senior secondary school. In 1968 there were 649 secondary schools in Finland, of which 448 also had a senior secondary school. It should be emphasized, however, that Tyk is classified as a private secondary school. In 1968, out of the 649 secondary schools 150 were controlled directly by the State, 133 were municipally owned junior secondary schools, and 366 were private secondary schools. The large proportion of private schools compared with other Scandinavian countries can be explained by the upsurge in the birth rate just after the war and to the dislocations caused by the large scale evacuations. The Finnish government was unable to finance the great number of necessary new schools, and undertook, therefore, to subsidise schools established by community and parent groups. The position of Tyk in the overall administrative structure of the Finnish educational system is represented in the following diagram.

THE POSITION OF TYK IN FINLAND'S SCHOOL ADMINISTRATION


Finnish Government
Minister of Education
Ministry of Education
National Board of Schools
Regional Government
School Department
Borough of Espoo Trustees
Officials
Board of Tyk
Parents
Headmaster
Teachers and other staff
Students

Under normal conditions the National Board of Schools controls the content of school courses with great care ; such details as hours of instruction for each subject are laid down, and individual schools find it very difficult to deviate from the quota. As a private school Tyk does not have any special privileges in this respect, and though the staff can plan the curriculum it has to be confirmed by the National Board of Schools. On the other hand, the Board is prepared to adopt a more liberal approach to schools which it regards as especially well planned and which it deems to have special responsibilities in the field of innovation and experimentation. To this extent, therefore, Tyk does occupy a more autonomous position, as the National Board regards its experiments as important for the whole of the educational system.

Nevertheless, this does not mean that the staff of the school have complete freedom. The National Board is often reluctant to sanction new teaching programmes if they involve heavy capital expenditure of which the Board has to meet 70 %. For other reasons the Board has also resisted attempts to reduce the teaching of the Finnish language and Religious Instruction at Tyk.

The degree of relative independence enjoyed by Tyk can best be understood by examining its financial position. Throughout the 1960s the school has been managed according to the principles which Urpo Ratia brought with him from the United States. Essentially, these are drawn from similar practices in private enterprise. Accounting plans are made for a period of five years, and all relevant forecasting is undertaken around this period. The overall position in respect of the school's finances can be seen from the table below.

THE ANNUAL BUDGET FOR 1970-1971 Fmk 3, 000, 000 (US$ 720, 000)

Income		Expenses	
State subsidy	70 %	Salaries	62 %
Espoo	8 %	Rents	19 %
Total public finances	78 %	Interests, amortizations	3 %
Tuition fees	14 %	Upkeep of buildings	3 %
Loans	6 %	Others	10 %
Others	2 %	Teaching materials	3 %
	100 %		100 %

One advantage of the school's relative independence is that the teachers are able to spend more than is usual in Finnish schools on teaching materials. Currently, for example, about Fmk 100. 000 is annually spent on teaching materials and the library. Very few schools in Finland can match this amount. The advantageous position of Tyk in comparison with other Finnish schools is set out in the table below which shows expenditure of secondary schools per pupil in 1968.

CURRENT EXPENDITURE OF GENERAL SECONDARY SCHOOLS PER PUPIL 1968 (in Fmk)

	Tapiolan yk	Private schools	State schools
Teachers' salaries	1200	965	1003
Salaries of non-teaching staff	90	92	89
Pensions	15	15	76
Social expenditures	99	77	71
Maintenance of building and equipment	2	13	31
Heating, water, electr., cleaning, etc	46	47	51
Rents, office expendit. fire insurance, etc . . .	268	43	9
Instructional equipment	64	10	10
Health services, etc	36	27	7
Welfare services for the staff	9	2	0
Total	1829	1291	1347

Though, inevitably, the money value of the state subsidy has risen the financial administrators of the school have been remarkably successful in maintaining that subsidy as a roughly constant proportion of the expenditure of the school, and so have enhanced their independence. Moreover, the officials have been able to negotiate extremely favourable grants from the Borough of Espoo. Indeed, the financial aid granted by the Borough is almost twice as big as the average aid given by other communities to private schools. It should be recognized, however, that Espoo is one of the richest boroughs in Finland, and has predominantly middle class and professional inhabitants. The table below indicates the occupations of the students' parents, and shows clearly the "over-representation" of the self-employed and professional groups.

STUDENTS BY PARENTS' OCCUPATION IN 1968-1969

(Official statistics of Finland)

	Percentage of Students	
	Tyk	Private and Municipal Schools
Agriculture and forestry	1.8	29.1
Industry, handicraft, building work		
Employers and self-employed	35.3	12.6
Employees	7.8	17.8
Commerce		
Employers	14.2	10.7
Employees	0.8	1.7
Communication		
Employers	4.0	5.0
Employees	0.7	4.6
Services		
State, Church, Communes	18.9	6.3
Teachers	4.6	3.2
Health and medical	2.6	1.3
Artists, writers	2.3	0.3
Other	4.4	3.1
Personal services	2.4	2.0
Occupation unknown	0.2	2.3
N =	1,064	199,618

Thus, statistically, the occupations of the parents of Tyk's differ significantly in two respects from the corresponding figures of the private schools in Finland. Firstly, there are many who hold high positions in industry. This is due to the nearby Technical University and the special nature of the inhabitants of Tapiola. Secondly, it is natural that there are only a few farmers and those few that do get their livelihood from agriculture are prosperous gardeners and truck farmers in the vicinity of the large city. Many of the parents have experienced higher education, and in these western suburbs of Helsinki taxable income per capita is the highest in Finland.

Children enter the school at eleven as a result of achieving a high number of points collected by a complex and "weighted" system. The main source of points is good performance at the entrance examination, they are also awarded for musical ability and to those who already have brothers or sisters at the school. Overall, the academic ability of the pupils recruited is high, and probably superior to the spread of ability in most Finnish schools. It should be noted, however, that there are two other secondary schools in Tapiola, and several available in Helsinki. Thus, parents can exercise a choice of where to send their children. Tapiola, however, is the most popular school, and for those parents who cannot afford the fees (which are about Fmk 440 per year), 10% of the places are made available free.

The school was originally planned for 700 children, and this number was reached in 1962-63, when for the first time the school had all eight classes. It was then decided to increase the number of pupils to 1, 000 as it was thought that a large school would be able to offer more varied facilities to students. In 1969-70 there were 1, 081 students in Tyk.

The school has no formal connection with any university or pedagogic reasearch institute. Nevertheless, those who work there believe that they are in touch with national and international developments in the field of education. Thus, the trends to democratisation, individualising of learning and increasing individual choice visible throughout Europe are manifest at Tyk. Informal contacts with university opinion has been maintained, and the Chairman of the Board, headmaster, teachers and even students have taken part in international conferences in their own fields and visited other countries on scholarships. The most frequent visits have been to the United States, but regular trips have been made to Central Europe and the Soviet Union.

Finally, of course, the school has to maintain its connections with Finland's school administration. In official terms this is done in four ways :

1) Written reports
2) Inspections by officials of the National Board of Schools.
3) The Experimental Office of the National Board of Schools approves the experimental programme for the coming year and checks the reports of the past year.
4) Extra State aid for the experiments has to be discussed with the Ministry of Education.

In addition, there are many unofficial dealings with the school administration. Negotiations are conducted with various working teams and there are many personal friendships with university people and officials of the school administration.

As already indicated the founders of Tyk aimed at an 8-year secondary school with 700 students, leading to university. This aim was reached in the school year 1962-1963, when the first students matriculated in the school, and the number of students had reached 774. Immediately, the target was raised, as the Board of Tyk considered that it would be easier to gather students for orchestras, choirs and sports teams from a large number of students and that the school building and its teaching materials would be used more efficiently. In 1966-1967 the limit of 1. 000 students was reached. The rate of growth of the number of students in the day school has slowed down since. An evening school was started in the autumn of 1968, and the school building and teaching materials became even more efficiently employed.

The school tries to take the same number of girls and boys as its students. During the first years the number of boys exceeded that of girls, but while the school has grown, the share of girls has kept increasing. The National Board of Schools has stipulated an entrance examination for the first class of the school and an eliminating limit for the first year of the senior secondary school. Girls seem to pass both these tests better than boys. Boys can be given extra points in the entrance examination and thus it is possible to take the same number of girls and boys. There are no means of compensation for boys in entering the senior secondary school. Boys also have more often to stay two years in the same class. All this results in the fact that the proportion of girls increases in the upper classes.

The staff of the school are attracted by the superior facilities offered at Tyk, and by the opportunity to experiment in conditions where there are plenty of resources. The advantages of teaching at Tyk can be seen by at least one objective measure :

NUMBER OF STUDENTS PER TEACHER IN 1968-1969

Tyk	18
Private Finnish-language schools	30
State schools	34

Overall, the National Board of Schools determines the teachers' qualifications and their position. The basis of the staffing arrangements in the Finnish secondary school system is that each teacher should give tuition in only one or two subjects. At Tyk this general arrangement is in force and the majority of teachers are university graduates. In addition to the normal teaching staff Tapiolan Yhteiskoulu has a full-time nurse and a school psychologist. The psychologist is part of the senior academic administration of the school. This internal organization consists of the headmaster, a deputy headmaster with special responsibility for the administration of the school, a deputy headmaster who is responsible for educational innovation, and the psychologist.

The physical features of the school are made up of 29 ordinary classrooms, 21 special classes, such as gymnastics and exercise halls, laboratories for physics, chemistry and biology, a language laboratory, workshops for painting, manual training and metal work, a library, an auditorium for 150 students, 2 household economy classes, 2 teachers' rooms, an office, conference and stock facilities and reception rooms for the nurse and the psychologist.

The building was designed by Jorman Järvi, Arch SAFA, whose objective was to build a low building in conformity with the local surroundings. Rooms with six corners were introduced by him, and these were adapted from a few primary schools that he designed. Another reason for the fact that the school has only one floor was the building base, an alluvial delta, on which it would have been very expensive to build a multi-storey building. After Jorma Järvi's death in 1963 Heikki Koskelo, Arch SAFA, carried on the planning of new parts.

Thus, Tapiolan Yhteiskoulu is a modern purpose built school in the most prosperous suburbs of Helsinki. The school has the advantages, therefore, of having a predominantly professional and middle class intake, and also widespread community support. At the same time the school has a large measure of independence which facilitates the process of innovation ; and all these factors have contributed to the school recruiting teachers who are disposed to experiment. It is now necessary to examine the objectives and aims of those associated with the school in order to see how their purposes relate to the features of the school and community which have already been described.

Chapter II

AIM AND OBJECTIVES

When the overall objectives of the school are analysed, a difference can be observed between the ideological educational aims and closer practical aims. Thus Yrjö Riikonen stated in his speech to students on the occasion of the inauguration of the new school, on 12 February 1961 that there is

> " . . . nothing but hope that you, under the roof of this school and under instruction of competent teachers, will become able, industrious and successful citizens for the service of our fatherland."

Now, however, the leading men in the school define the ideological educational objectives as follows :

"Our objective is to educate active, independent individuals " (Urpo Ratia)

"Our objective is to arouse the interest of young people in continuous self-education both in intellectual and physical fields of life. " (Heikki Niemelä)

"Our educational objective is an independent, enterprising, dynamic, social balanced and human individual. " (Reino Nieminen).

In ten years a clear change has taken place in the objectives of the school. Nobody talks about educating able, industrious and successful citizens of the fatherland. In the 1970s the trend is to educate active, independent, social individuals in the first place, a change of objectives which reflects a change in the attitudes of the whole Finnish society. Orations emphasizing patriotism are not in fashion any more, global, ideological goals stress, instead, the need to produce active, social citizens of the world. Undoubtedly, this change from an inward looking patriotism to a wider concern with outward looking attitudes such as co-operation and internationalism reflects more significant changes associated with Finland's growing prosperity and its position in the international order. Nevertheless, the overall change has certainly facilitated the adoption of progressive and experimental ideas in education, and it is important to see how these have been worked out at Tyk.

The first headmaster of the school expressed his objectives in 1960 when he wrote that the

> " . . . secondary school is becoming a school for every man, and this gives reason for examining if the traditional definition of the programme is still valid with its sole objective concerning further education, or if the school now, more than ever, has to pay attention

> to the needs of the ever-increasing number of young people who finish their studies after the junior secondary or after matriculation. It is necessary, therefore, to carry on experiments to examine the possibilities of vocationally directed teaching to make the teaching and education more effective. It is the objective to develop streams of study that, besides standard education, would give proper basic education for students who are talented in some practical fields."

From the beginning, therefore, the work of the school was concerned with practical and vocational education, but now the directors of the school emphasize their objectives in terms of bringing about attitude change on the part of the pupils, particularly in respect of what are looked upon as the "problems" of society. Thus Urpo Ratia, the Chairman of the Board of the school argues that, "Our objective is to educate individuals who are ready to enter society and are prepared for futher studies, good characteristics being emphasized and bad ones eliminated." Whilst the headmaster notes that, "Our objective is to arouse the students' interest in contemporary problems, to make them able to adopt information to offer possibilities for developing their talents, and to instruct how to use them, to offer stimulation for the encouragement of arts and practical skills."

The changes in these more school based objectives can also be related to structural changes in the wider Finnish society. In the late 1950s and early 1960s the schools were full of the large number of children born in the immediate post-war years. At this stage it did not seem possible for all to obtain a good vocational training, and it was anxiety in this respect which encouraged the first headmaster to plan the commercial and technical streams. Now, however, the birth rate has fallen, and the classes are smaller. Moreover, there are now far more opportunities both for secondary education and higher education. Consequently, the school has been able to pursue objectives more related to preparing students for further study.

In the organization and pedagogic arrangements of the school the recent developments have involved increasing the opportunities for students to exercise freedom of choice in their studies, more student participation in the decision making processes of the school, and greater individualisation in the teaching and learning process. Although these developments, which are part of an innovative and experimental movement with equivalents in many different countries are regarded by the staff as worthwhile, the parents are less confident

The attitudes of the students' parents towards the educational objectives were examined by means of stratified sampling. The parents of the children in the first, fourth and seventh grades were invited to complete a questionnaire. The sample included 51 parents, and answers were accepted by letter and by telephone. The basis of the questionnaire was the presentation of the stated objectives of the leaders of the school, Mr. Ratia, Mr. Niemalä, Mr. Nieminen and Mr. Hurmola, to the parents, who were then asked :

a) If they accepted these objectives,

b) If they had noticed that they had purposely been striven for, and

c) If they had noticed that there are some other objectives.

50 % of the parents invited co-operated with the investigators, the parents of the children in the seventh group showing the lowest response rate. The conclusions concerning the parents' attitudes are drawn from the replies to this survey.

From the results it can be argued that about 50 % accepted the objectives set out by the senior members of the school, and slightly less than that proportion believed that the objectives had been striven for. The parents, however, did indicate that they had a different order of priorities from that of the leading teachers and administrators. Thus, the majority of parents suggested that more emphasis should be placed upon academic study with the objective of obtaining university entrance for their children.

Similarly, the staff objective of extensive freedom of choice by the pupils aroused the parents' hostility. Such choice was believed not to be in the best interests of the children, who, the parents argued, need planned guidance. Also the parents pointed out that it was good for the children to learn to perform difficult and unpleasant tasks. Up to 40 % of the parents expressed these kind of anxieties, and a somewhat smaller number doubted whether the students had a right to have a say in the organization of the school. A very small minority challenged the stated objectives on the grounds that they were unrealistic. As one parent put it "God, home and the fatherland had been completely forgotten". In general, many parents still consider good discipline and the giving of basic information by teachers as important.

Several lesser problems were also mentioned by the parents. Thus, some mothers indicated that the female point of view had not been considered when the major objectives were established. Others protested that whilst they found the overall objectives of the staff acceptable the organization of the school prevented the goals from being realised. The few who fell into this group pointed out that the large size of the school and of some of the classes prevented children being individually known. Similarly a small number of parents pointed out that the highly competitive atmosphere associated with much of the academic work at Tyk was not conducive to the global aims associated with co-operativeness. Overall, however, the largest single group of parents was generally in agreement with objectives set out for the school, and believed that the school was striving successfully to achieve them.

The teachers' global objectives, and their attitudes to those of the senior staff were studied by conducting lengthy individual interviews. The great majority of the staff thought that it was essential that teachers had some philosophical and ideological justifications for their work It was agreed, however, that such beliefs should be the individual choice of the teacher and not imposed from above. Nevertheless, most of the teachers said that they felt themselves close to the position of Reino Nieminen who believed that the school should attempt to develop independence, initiative and social balance in the individual. On the other hand, there were a few who argued that global objectives were difficult to handle and insisted on seeing their work in terms of immediate practical objectives associated with a particular piece of teaching. Indeed, it was impressive to note the clarity and forcefulness with which the teachers could enumerate their objectives in respect of their teaching subjects, and these are considered in more detail in the sections dealing with innovations.

The pupils generally accept the aims and objectives of the teachers. It was very noticeable that those pupils who had experienced other secondary schools emphasized the great differences between Tyk and the other schools. At interview, the younger pupils regarded the transmission of good and useful basic knowledge and skills as the most important objectives. They agree that Tyk is a good school and that the teachers are efficient. Those who have moved from other schools pointed out that the teachers at Tyk adopt varied and modern teaching methods and that the social climate is generally relaxed and free. Many remarked that the regular students at Tyk did not realise how well treated they were.

Amongst the older pupils the objectives claimed by the senior administrators of the school were treated in a somewhat derisory manner. As one argued, "Tyk is an experimental school only because the leading men in the school want to swell with pride in the company of their influential friends". Generally these pupils argued, in common with current radical student opinion, that the only objective of the whole Finnish school system is to produce manpower and to maintain and continue the existing Finnish society. As far as they were concerned Tyk differs from other Finnish schools only in that there are more machines and materials to help the pupils and teachers, and that the teachers may be a little more efficient than elsewhere. These senior students insisted, however, that this did not really alter the nature of the objectives held by those in authority. Any differences between Tyk and other parts of the Finnish educational system were, to them, quantitative rather than qualitative. They even claimed to be unimpressed by the reforms in pedagogy, claiming that these were only basic in two subjects - music and biology.

The critical students, however, also described the kind of changes they wished to see in the school, and implicitly, therefore, indicated some of their objectives for the school. Though the participation of students in the administration and planning of school work has been introduced into Finnish schools its development at Tyk has been rather slow. Consequently the pupils proposed that there should be greater pupil democracy and consultation at the school. If this did occur then pupils were confident that the curriculum would be amended to offer more courses and a wider choice to students, and also, that the pupils would become involved in planning the courses. They argued, further, that pupil participation in the planning would be a counter-balance to the influence of the examination system on the syllabus. The students also complained that the school was too large and that its size prevented good personal relationships amongst all pupils. They were anxious that arrangements should be made to break down the social barriers caused by the size of the school in order to establish better interpersonal relationships. Such arguments as were developed by the senior students reflected international tendencies amongst students which are strongly represented in Suomen Teiniliitto (Union of Finnish Secondary School Students) and also in the junior committees of the political parties.

It is clear, therefore, that though the senior administrators of the school have clearly stated objectives in relation to the work of the school, the parents, teachers and pupils do not altogether accept them at their face value. It is important in these conditions to examine the advanced practices in detail and then to consider the constraints which operate upon the innovative processes at the school.

Chapter III

INNOVATIVE AND ADVANCED METHODS

At Tyk inter-disciplinary teaching has not been developed strongly and the identity of the separate subjects is still clearly defined. Though the subject teachers do co-operate e.g. geography and physics, it is best to discuss the syllabus and work of the school in terms of the individual subjects. In the following sections, therefore, the nature of the work in each subject is discussed, beginning with the arts subjects, followed by the sciences and concluding with the practical subjects.

Finnish language and literature form a collection of various subjects, such as learning of the structure of the Finnish language, oral and literary expression, semantics, literature, mass communication, and the history of literature. Old academic traditions and national romanticism have for long constrained the content of this subject. Nevertheless at Tyk the abstract categorical teaching of grammar in the lower grades has been given up and the teaching has been made more simple and practical, making the use of Finnish and expression in Finnish easier. The tendency in the teaching of literature in the lower grades is towards literature, using novels in addition to a reader.

At the same time special provision has been made for those children who have difficulties in reading and writing. Currently, proposals are under discussion with the Borough of Espoo concerning the possibility of setting up a special communal organization to help these children. Finnish teaching at Tyk has, moreover, been radically transformed by the adoption of world wide literature as a basis for study rather than just the work of Finnish authors. In addition the teachers of Finnish make much use of audio-visual techniques both for teaching the language and also for the special presentation of collages. In this respect the financial standing of the school has been of some significance as it has been able to afford all the necessary technical equipment and the change in series of books required. Moreover, the teachers fully recognise that the home circumstances of the children facilitate the study of literature as the parents encourage literary interests, partly as a means of fostering international understanding

Essentially the source of innovation has been the staff who have defined the need for change. They have, however, developed their ideas from a variety of sources - other Finish experimental schools, the ongoing work in the Swedish comprehensive school system, the teaching of Finnish language in the Finnish parts of Sweden, the teaching of the Estonian language in the Soviet Union. In turn, the teachers at Tyk have attempted to publish and disseminate their own work by the writing of articles in professional journals, lectures in teachers' seminars and by maintaining links with other experimental schools.

Foreign languages. It is considered very important for citizens of a small country in a linguistically isolated position to know foreign languages. Generally, the share of foreign languages in the instruction programmes of Finnish schools is large and the founders of Tyk regarded it as important to learn one important world language well. English was chosen, and its teaching was started in the first grade, while other Finnish schools started in the Swedish language, the other national language. As for other foreign languages, better and better possibilities of choice have been offered. Students of the senior secondary school can choose courses of different lengths in the following languages : German, French, Latin and Russian.

The teaching methods of foreign languages have changed very remarkably in a decade, and Tyk has served as a model, with other experimental schools. There are fewer translation exercises and more active oral and written exercises. Small work groups in the lower grades, the language laboratory and tape recorders have contributed to the change. Tyk has concentrated especially on the development of different types of tests, including vocal tests. The sources of these ideas are international, and teachers have participated in international conferences and study programmes in the United States, Western Europe, Scandinavia and the Soviet Union. As with the teaching of Finnish the progress in foreign languages has been assisted by the financial well-being of the school. It has been possible to purchase a wide range of foreign literature, audio-visual aids, and to offer teachers scholarships to travel abroad.

Geography instruction has undergone a complete revolution. The content of instruction has progressed from the teaching of individual countries, one after the other, to the teaching of uniform areas of the world. In the lower grades pupil-involvement has been developed by stories about homes, children and life in foreign countries. In the upper grades, the main emphasis is on cultural geography, including urban and regional geography, international economic and political geography, problems of developing countries. Teaching methods have become more individual. Especially in the lower grades students can proceed according to the programme they plan themselves, use various source materials, participate in discussion groups, and listen to optional lecture series. In the upper grades geographical research techniques are taught, the use of maps, statistics and quantitative small studies, as well as automatic data processing.

This innovative work was begun at Tyk. Ideas have consciously been sought from American, West European and Scandinavian school and university study books. The geography teachers have travelled widely to inspect teaching methods in other countries and to collect relevant material, and much fruitful contact has been maintained with the Institute of Geography of the University of Helsinki.

Again, realization of innovations has been furthered by the good financial standing of the school. It has been possible to purchase a large library and to subscribe to journals and magazines, to get maps and audiovisual material. The independent position of geography, which is exceptional in Finnish schools, is mainly due to the fact that Mr. Heikki Niemelä, one of the headmasters of the school, is a geographer by training. Also, close co-operation by the team of geography teachers of the school has been vital in the rapid and extensive realisation of the innovations.

Innovations have been spread through text books. So far, eight books have been published, two of them have been translated into Swedish, and the translation of another two is under discussion (for Swedish-language schools in Finland). A series of geography text books covering the whole school is being prepared. Trial text books in duplicate form have been used, and they have usually also attained country-wide distribution. Teachers from other schools visit Tyk in order to familiarize themselves with the instruction methods. Articles have been written in journals, courses have been given in summer universities, and teachers have participated in discussions on the television.

History teaching at Tyk has been transformed by the widespread use of source materials. Thus, the students are given packages which contain copies of original documents, references to other sources, pictures, selected information. From this material the student is invited to attempt his own reconstruction of the past, with special emphasis being placed upon the creation of the ordinary man's views of the times through which he lived.

Religion belongs to the curriculum of the whole school as a compulsory subject. The National Board of Schools and Finland's Evangelic Lutheran Church behind it have strict control over the teaching hours and content of religious instruction, being afraid that concessions would lead to fading away of such teaching at school. Modernization processes are therefore slow everywhere, and they concern mainly changing of subjects from one class to another. There are, however, signs of a change in religious instruction towards studying the phenomena of religious beliefs and atheism. But all attempts at innovation have been turned down by the opposition of the National Board of Schools.

Mathematics. Innovations in this subject have followed international trends. Tyk changed over to the new mathematics at an early stage, since the first headmaster of the school, Mr. Tauno Kajatsalo, was a mathematician, and he was in contact with the Nordic innovation committee for mathematics. The division into streams and the optional study plan in the school have made it necessary to replan the material being taught on the various courses. The mathematics courses are now designed to fulfil different objectives. As a result of the formation of more precise goals it has been possible to introduce a measure of programmed learning and also to reduce the size of the class unit by a flexible use of team teaching. The basic approach embodied in the syllabus is that of set theory which the maths teachers at Tyk think is the best start to the teaching of the subject. Within the school innovation in Maths teaching has been greatly encouraged by the members of the board who have attached special importance to the subject .

Physics and chemistry are connected closely to mathematics in the Finnish school organization, the same teachers teaching all three subjects. The most important of the innovations is the development of the practical work of the students both in the junior and senior secondary schools. For those in the senior secondary school an open laboratory is available where the students can work individually at their own pace. The ideas for the work of the senior secondary school originated within Tyk. Examples have been deliberately followed from foreign school and university text books. Trips have been made for the purpose of study, and ideas have been received from Mr. Vesa Lyytikäinen in the Ministry of Education.

The science department staff have been very active in publishing details of their work. Three laboratory books have been published within the school, and a book series is on trial for the senior secondary school and the comprehensive school system. Articles have been written in professional journals, summer courses have been arranged, and lectures have been given in various teachers' seminars. The teachers of biology who have moved to other schools have taken with them the new methods used at Tyk. The biology instruction throughout Finnish comprehensive schools is being changed, and Tyk has obviously served as a model.

Handwork. Since the 19th century, girls' knitting and needlework and boys' woodwork have been included in the study plans of Finnish schools and the methods of instruction have even served as a model for other countries. Mr. Urpo Ratia and Mr. Tauno Kajatsalo thought, when planning the first curriculum for the school, that metalwork teaching should be offered to the boys, and so a metal workshop was built. A new workshop was completed in 1969 and the senior metal work instructor played an important part in its design after gathering ideas from Finnish vocational schools and visits to Central Europe. While the workshop was being planned, however, there was a lot of opposition from the building authorities and fire service. By persistent negotiations and a little stubbornness these conservative elements have been overcome.

Girls' handwork has gone through a big change in the whole country, resulting from the use of new materials and working methods. The girls' handwork class in Tyk is equipped with many-sided sewing machines, looms and other accessories to enable the fulfillment of these new ideas. Many of the ideas have been obtained from a teachers' college in Helsinki where handwork staff are trained. Since the teacher at Tyk is a housewife, she has also brought the objectives of handwork teaching closer to home, on the grounds of her own experiences.

Domestic economy. Domestic economy at Tyk is taught in the 2nd and 3rd grades both to boys and girls. In this respect, the school differs from other schools, as domestic economy is usually taught only in upper grades, and it is obligatory only for girls. It has thus been necessary to plan the tuition completely on a new basis, and this has led to more practical training, the planning of cooking and household work for a family unit. In this respect, too, Tyk departs from the curriculum of the National Board of Schools, which emphasizes theoretical learning about food and nutrition as well as family training. All students of the secondary school have an opportunity to cook one afternoon a week.

It should not be assumed, however, that the domestic science teachers at Tyk have been able to innovate at will. Though they have had the full support of the headmaster and the directors of the school, they have had to face criticism and opposition from the National Board of Schools and the university authorities responsible for training domestic economy teachers. Both of these bodies support more theoretical teaching than is given at Tyk and the establishment of "laboratory" type kitchens. Altogether in this field, developments at Tyk are regarded as merely interesting curiosities and its innovations are not generally accepted.

In physical education the school teams have been remarkably successful at soccer, basket ball and ice hockey. As a result the school has achieved a great deal of favourable publicity, but it is in the non-competitive aspects of physical education that the most significant changes have occurred. Innovation has enabled the students to exercise a much greater choice in the type of physical activity they undertake and a more scientific approach has been brought to this type of education. The source of the new ideas has been the Faculty of Physical Education at the University of Jyväskylä. The basic work done here on physical growth has enabled a more systematic training to be implemented in the schools. Tyk was one of the first to take up the innovations which have spread throughout Finland ; indeed, the National Board of Schools now expects from teachers the kind of planning that was originally developed in Tapiola.

Art instruction has undergone a complete change at Tyk, both in respect of methods and materials used. The art teachers have endeavoured to introduce new materials to the students and to provide the opportunity to work in them.

Typing, which is an optional subject in the 4th and 5th grades, is taught only in a few Finnish secondary schools. The typing teacher at Tyk has created a teaching method that is completely new in Finland, based on drills to be typed to a given rhythm. Results have been considerably better and quicker than those of the old methods. The ideas have been obtained on study travels to Switzerland and Germany as well as from American typing manuals. The innovations have led to two study books, one of which has already appeared in five editions. The teacher has given lectures, participated in discussions and written articles in professional journals. Opposition in conservative professional circles has been strong, but the ideas have been spread as the result of teachers' persistence.

Music is the subject in which Tyk has probably the most widely known reputation ; indeed, it has international fame. Partly this has been the result of strong local support as there is an Espoo Institute of Music which is directed by the senior music master at the school, Mr. Erkki Pohjola. The general context in which the school's music is taught is strengthened also by the relative wealth of the school which facilitates the purchase of instruments and music sheets. Mr. Pohjola argues that this experience of hearing children's choirs in Hungary convinced him of the possibility of such musical performances reaching a level of considerable artistic merit. The Tapiolan choirs have become amongst the most famous in Europe.

The teaching arrangements for Music at Tyk are different from those which exist in other Finnish schools. The children are quite sharply divided according to their musical interests and abilities. Mr. Pohjola has remarked that in order to do this he has had to "evade the school regulations". The choirs and orchestras are organised according to the musical abilities of the students, regardless of their age. Thus, the best play or sing in orchestra A or choir A, and then there are B and C orchestras and choirs.

Much of the success of the music teaching in the school is attributable to the personal energy and qualities of Mr. Pohjola and it is through his initiative and enthusiasm that the changes in the position of music in the school have been brought about. The success of the music teaching in an ordinary secondary school is, perhaps, the most notable innovation

Library. Although there is a well-managed and large public library system in Finland, school libraries are usually small and ineffective. The founders of Tyk however paid attention to the necessity for a good and central library, the ideas for which came obviously from the United States. The architect who planned the school, however, did not allow sufficient facilities and there have been difficulties in locating the library. The main library, where students can spend their free periods has a leading librarian and an assistant. In addition to the main library there are collections of books in each special class room, the largest and most used of which is the reference book collection connected with biology and geography instruction.

It is, however, not only in the curriculum and pedagogy that the school is notable for its innovations. In a whole variety of ways new practices have been introduced at Tyk - denominational morning prayers have been replaced by a less formal beginning to the school day, and pop music is frequently used as part of the service in place of the traditional church and classical music. Parental involvement in the school is strongly encouraged by the staff, and events organised by the mothers of pupils, such as the Xmas bazaar and the spring gala, are important social events in the Tapiola community. Indeed, there is actually a voluntary association in the district called Tapiolan Yhteiskoulun Tuki - The Supporters of the Tapiolan High School.

Another important innovation at Tyk has been the institution of a full time health service. A nursing sister and a psychologist are available to both students and teachers throughout the day, and both participate in all meetings concerning students. In addition, the psychologist attends the meeting of the Board. Although Tyk was not the first Finnish school to have a nurse, the thorough organization of the service and the system of regular health checks has come to serve as a model for other Finnish schools.

It is clear, therefore, from this detailed discussion of the qualitative changes at Tyk that the sources of innovation have been varied. Nevertheless, certain features are especially worthy of attention. Overall, the facility to innovate has been greatly encouraged by two separate but not independent factors. Firstly, the measure of financial freedom possessed by the school and its leading administrators has been important. Secondly, the social class mix in Espoo, with its very high proportion of highly educated middle class parents has been very helpful. Under these circumstances those who have been able to introduce new ideas have been confident that both financial and moral support will be available. It is possible to argue that the whole ethos of the local community is directed, in a general fashion, to being receptive to new ideas and that the community has both the money and the administrative skills available to indulge its interests. The school, therefore, could be seen as just one illustration of the general trend, particularly as local commercial and civic leaders have been so instrumental in establishing, setting up and leading the school.

Such an argument, however, ignores the significant contribution made to innovation by the professional expertise of the teachers, who have determined, more than anyone else, the direction and nature of the changes. Tyk has clearly been able to recruit successful teachers not only because the social context of the school ensures that many of them are likely to live in the local community, but also because the facilities and resources available at the school seem attractive to teachers. The school has, therefore, probably had the opportunity to appoint teachers with a high level of professional skill and commitment. It is not surprising that such teachers are sensitively aware of developments taking place in other countries and to the broad trends of educational change on an international front. As a result the innovations in the school can be clearly classified. Overall, there has been a movement within almost all the subjects to greater freedom of choice for pupils and towards the individualisation of instruction. In turn, this has led to a revision of syllabuses and to the development of work sheets and individualised programmes. At the same time the changes have facilitated the introduction of new material and have enabled the staff to establish a reputation amongst educational experts as leaders in the field of innovation by publishing the materials and ideas which have informed their work at Tyk.

At this stage it will be useful to consider in more detail the development of one particular innovation at the school, which affected the whole staff - the flexible curriculum. This special study will enable the initiatives to innovation to be examined, and will also provide an opportunity to consider the restraints and constrictions which operate within the school and the wider society.

Chapter IV

THE FLEXIBLE CURRICULUM - A SPECIAL CASE

Tyk's first curriculum resembled that customary in Finnish secondary schools. At the start of the 1960s, when the school had got under way, its leading administrators started to plan for another kind of curriculum, where the students would have more choice. During the spring of 1960 a new curriculum was planned, and the National Board of Schools approved it in May 1960.

The main idea behind the new proposals was to offer to students a choice of three distinct curricula - technical, commercial and general, such an appro of three distinct curricula - technical, commercial and general, such an approach being far more flexible than that normally found in Finnish schools. By 1965 staff, and teachers visited the United States in order to study new curricula. In fact such visits were only part of an extensive bout of activity on the part of the staff to gain new ideas and information.

Model curricula from the United States were closely examined, visits were paid to the greatly respected experimental school in the centre of Helsinki, Suomalainen Yhteiskoulu, and senior academics from the universities were invited to consider the issues involved. Simply, the staff at Tyk were anxious to introduce a completely flexible curriculum incorporating a wide range of student choice. Clearly, since many interests were likely to be involved, lengthy consultations were necessary. The headmaster arranged discussions with pupils, parents and subject teachers, and after much negotiation difficulties were resolved. A major problem was the anxiety felt by teachers that their subject was not to be given sufficient prominence in the new plans. By late 1967 the headmaster was confident enough to put his proposals to the National Board of Schools whose approval was an absolute necessity.

The Board raised many objections. There were complaints that the arrangements made for religious instruction were unsatisfactory, and the Board insisted that two such lessons a week were made compulsory at Tyk. Other objections came from those on the Board who were closely identified with the traditional subjects, and who feared that innovation at Tyk would challenge their prestige and influence. The teachers at Tyk recognised that careful negotation was required in these circumstances as well as the willingness and wit to make apparent alterations which would satisfy the members of the National Board. The new curriculum became operative in the autumn of 1968, and at the time of writing applies to the whole senior school, with the first students just approaching their matriculation examinations.

The basis of the new curriculum is that the students have a time-table which might vary between 32 and 38 hours a week. Sixteen of these hours are taken up with compulsory subjects - Finnish language and literature, English, Swedish, Finnish history and geography, religious instruction and physical education. For the remaining half or more of their time the students may, according to certain principles, choose their own courses of study. Essentially, they must choose one of the mathematics courses and one of the art courses, but there are four choices in these available to them. Moreover, in most of the subjects courses of differing lengths and complexity are offered. It is important to note, also, that special courses can be arranged within the system so that, by request, international affairs and computer science have become almost permanent by the demands of the students.

The staff are convinced that this system of choice improves the motivation and interest of the students. The pupils have, by the act of choice, a commitment to the subjects they have selected, and can also modify their courses according to their abilities. Moreover, following upon the development of the flexible curriculum,changes were made at Tyk which introduced flexible teaching groups and team teaching.

The idea for this innovation first came from the National Board of Schools. The Geography teachers at Tyk adopted the suggestions informally as they were personal friends of the officers of the Board who made the proposals. In the autumn of 1969, however, the American advocate of team teaching, Mr. Lloyd Trump, visited Tapiolan. His visit provided the staff with the opportunity to discover far more about his ideas, and gradually they have been adopted in some subjects. Geography and Biology were the first subjects to introduce flexible groupings and team teaching, but now variations on the arrangements can be found in the teaching of physics, chemistry, mathematics and physical education. Some teachers have opposed the innovations on the grounds that the large teaching units become nothing more than lecture classes and are not appropriate to the younger children. The headmaster, however, has managed to prevent the disagreements on the staff from becoming too overt by his skill at organising the time-table.

It should be recognised that the flexible curriculum along with team teaching frequently makes it possible for students to choose which teacher will teach them, and also allows the teachers to select the work at which they are best or for which they have the most enthusiasm. The teachers claim that this system is more efficient and that the small group work involved evokes a better response from the pupils than more formal class teaching.

Thus the flexible curriculum and its associated developments provide an excellent illustration of the diverse factors influencing innovation at Tyk. It is clear that international developments become taken up by enthusiastic teachers, in this case with the encouragement of the National Board of Schools, but also that the changes provoke opposition. The resourcefulness of the headmaster enables a compromise situation to be established which incorporates the innovations into the existing structure. Finally, therefore, it only remains to consider the overall management of innovation at Tyk and the difficulties and constraints that have been encountered during the processes involved in operationalising the major ideas.

Chapter V

INNOVATION AND RESTRICTION

It is impossible to consider the development of innovation at Tyk without reference to the overall government and administration of the school. All those who work there are convinced of the importance of the system of management which has been established. The headmaster at Tyk is supported by two deputy headmasters, one who concentrates his work on the financial affairs of the school, and another who has special responsibility for educational innovation. Thus one of the deputy heads, working in close association with the headmaster, has an almost total commitment to encouraging and implementing innovation within the school. The same person is responsible for consulting the heads of the various Departments so that not only can new ideas be fully discussed but also objections to proposals can be raised in terms of the legitimate interests of the main teaching departments. Moreover the senior staff of the school consider that it is of the utmost importance to have someone in the school with special responsibility for innovation, particularly in view of the architectural design of the school. The one-storey building means that the classrooms are "strung out" over long horizontal distances which, it is thought, could lead easily to social isolation amongst the teachers.

The arrangements described above which involve a senior teacher mediating new ideas between the headmaster and the rest of the staff, encourage ordinary teachers to put forward suggestions. Indeed, the headmaster has said that one of his main tasks is to consider, reconcile and implement many of the differing proposals that emerge from the enthusiasm of the teachers. Moreover, there are other important structured features of the school administration at Tyk which are designed to deliberately encourage innovation. Thus, from its earliest years the school has had available a special fund which can be used to encourage new developments that might arise during the middle of a financial year. This fund, developed by Urpo Ratia, has proved extremely beneficial to those who have wished to gather information about innovation in other parts of the world.

Indeed, Mr. Ratia's determination to encourage innovation within the school is marked by a long term campaign to provide support for those prepared to experiment and of hostility to those who will not adopt new ideas. In the mid-1950s the Board of the school found that innovation was not progressing as rapidly as its members had hoped. Mr Ratia was particularly disturbed by the way in which some teachers held back on experiments in their work. Mr Ratia believed that this was due, in part, to the relative youthfulness of the staff and the consequent unwillingness of inexperienced teachers to take risks. To deal with the problem he persuaded the Board to withhold the additional pay for teachers engaged in new work until they had presented a report on their innovations. At the same time Mr Ratia set about removing from the Board those members who, he believed, were of a conservative temperament, and then replacing them with persons more inclined to accept innovation. There is little doubt that these firm, almost coercive, measures had their result, and that by the middle of the 1960s the base upon which innovation could proceed was firmly established.

The policies of Mr. Ratia in respect of those who did not share his thinking on progress in education are symbolic of his more general orientation to the administration of Tyk. He is not impressed by the virtues of all members of the school participating in the decision making processes, and this probably accounts for the relatively low level of direct involvement by the pupils at Tyk. Mr. Ratia argues that full consultation is necessary if people are to be affected by change, but that decisions about and implementation of policy can only be undertaken by a very small group of persons who know clearly the direction in which they intend to travel. As already suggested, Mr. Ratia's firmness of purpose has been reflected in the administration and organization of innovation at Tyk.

Innovation at the school has, of course, been made operational in the classroom by the teachers. It is important to note that Tyk has acquired a large proportion of teachers dedicated to introducing new ideas into their teaching, and into their relationships with children. Not only has the policy of the senior administrators of the school been to recruit such teachers, but the social context of the school has provided the opportunities in which they can reasonably experiment. The voluntary nature of the school has given to the teachers a measure of financial independence which has enabled them to pursue innovation in a direct fashion, rather than having to be dependent upon government grants. Moreover, the resources devoted to innovation at Tyk are greater than at other Finnish schools. Whilst some of this financial well being and independence can be attributed to the skilful management of Mr. Ratia and his Board, most is associated with the district in which the school is established. As has already been demonstrated Espoo is an extremely prosperous middle class residential suburb of Helsinki, with a very large proportion of the parents having had higher education. Moreover, the school is highly selective. Under these circumstances, therefore, the pupils can generally be looked upon as receiving support from their families, and the whole educational process is deemed important in the local community. In addition, as a middle class community this one abounds with voluntary associations and fund raising projects. As described, many of these involve financial support for the school and so serve to tie community feeling and the work of the school more closely.

Innovation at Tyk has benefited also from the professional expertise of the teachers. The staff of the school are characterised by their international and outward looking perspectives. The school has several teachers who have lived in the United States and others who have held visiting scholarships there. Altogether the "take-up" of American educational literature in the school is very noticeable, whilst all Finnish schools can take ready advantage of changes and new ideas which affect the Scandinavian countries generally. Currently, development in comprehensive education in Sweden is serving as a focus for new ideas throughout the Finnish educational system and the teachers at Tyk are paying special attention to the changes. Finally, Finland's unique geo-political position has given it an extremely favourable opportunity to exploit innovation which originates in Eastern Europe ; language teaching, music teaching and geography teaching have benefited from this type of association.

The descriptions of innovation at Tyk have provided a detailed analysis of the nature of change at the school. It is clear, however, that the general direction of the experimentation has been towards greater flexibility, more choice, and the individualisation of instruction. Flexibility and choice are the main characteristics of the new curriculum. Pupils are offered a great variety of subjects taught at different levels. Moreover, the system has sufficient freedom to offer subjects which the pupils have suggested or to incorporate special projects on current affairs as they arise. Additional flexibility and freedom are obtained through team teaching which makes the best use of the teacher's abilities and gives more opportunity to the pupils to control their learning experience. Individualisation operates at several levels. Not only is there choice across the curriculum for pupils but within each subject teachers attempt to offer students some choice of work tasks and opportunities to prepare materials suitable for individual learning.

Clearly, in the 15 years in which the school has been concerned with innovation there have been constraints and restrictions which have modified the plans of those in charge of the school. Perhaps most important amongst these has been the inflexible national legislation concerning secondary schools, which is administered by the National Board of Schools. All major decisions within the school relating to time-tables and curriculum have to be referred to the National Board. It has required a great deal of effort and skill on the part of the administration at Tyk to persist in the lengthy discussions necessary to convince the Board of the value of some of the changes which have been proposed. In Religious Education, however, it has proved almost impossible for the teachers at Tyk to undertake the innovations they desire. It is likely that this is one factor behind the unfavourable attitudes and poor behaviour manifested by the pupils to this subject and its teachers. Behind the Board, however, there is the Evangelic Lutheran State Church of Finland which is generally conservative and anxious to prevent the growing secularisation of life in Finland.

As in other countries the rigid examination system is regarded by many teachers as a barrier to innovation. In particular, the teachers of Finnish look upon the matriculation examination as being rigid and conservative, and hindering the development of pupils' creative writing. Other teachers note that as the students get closer to the matriculation examinations they are forced to adopt more conventional teaching methods, such as giving the pupils the opportunity to practise examination questions. Paradoxically, however, it is probably the very high success rate of the pupils in public examinations which enables much of the experimental work of the school to go unchallenged by the parents. This seems to be likely since the parents have shown themselves concerned that their children do well in the examinations. It must, of course, remain problematical whether the success of the pupils is attributable more to the innovatory methods of the school or to their general abilities and supportive home backgrounds. Tyk, it would appear, has as its pupils those children who tend to succeed with any type of pedagogic arrangements. In this context it should be noted that some teachers, e.g. those in mathematics, claimed to appreciate the stimulus induced by the examinations and argued that it improved the quality of their teaching.

Possibly one of the greatest barriers to innovation is simply the weight of the work load placed on individual teachers in an experimental situation. Indeed, the psychologist who had only recently been appointed at Tyk, believed that some of the teachers operated in conditions of stress. Not only are the teachers highly involved with their work but they have additional responsibilities in connection with the preparation of material for individualised instruction and the writing up of reports upon their innovative work. Moreover, because the school is somewhat unique in Finland the teachers have to accept some responsibility for publicising their work.

It is not surprising, therefore, that some pupils and a few parents complained that the highly competitive academic atmosphere of the school militated against some of the wider conceptions of value embodied in the school's social objectives. For example, the emphasis on academic and sporting success appears to conflict with the wider goals associated with the development of co-operation amongst pupils and service to the community. Similarly, some pupils, parents and teachers resent the way in which the success of the students in the matriculation examinations is used in the community as an index of the teacher's efficiency. On the other hand it should be noted that those pupils who have had experience of other secondary schools emphasize that the atmospnere at Tyk is more pleasant and relaxed than elsewhere.

Finally, not all pupils have accepted the innovative nature of the work at Tyk. Some claim that the school too readily reflects the nature of Finnish society, and makes insufficient attempts to criticise that society. Moreover, they claim that their arguments are supported by the emphasis on examination success both for the pupils and the teachers. Other students criticise the fact that the headmaster retains some conventional means of control over them. Though there are few punishments in the school, the headmaster still has power to suspend pupils and after due consultation to expel them. In a few cases expulsion has occurred and certain pupils look upon this as a negation of some of the supposed social objectives of the school ; it appears to them that the teachers are passing on their problems, rather than attempting to solve them. It is hoped by the headmaster, however, that the recent appointment of a full time psychologist will assist in the treatment necessary for the occasional difficult pupil.

Inevitably, there have been some unintended consequences of the innovations. The large work loads on the teachers have already been mentioned. Some teachers, however, say that they have found it difficult to adjust to the abolition of the formal division into "classes", and that they miss the expressive relationships with pupils which can develop under the old system. As one put it, "I miss having my class". In the early years of the school it was characterised by fairly high rates of staff turnover as those who could not accept the pace of the changes left. More recently, however, the staff have become settled, but the reputations established by some of the teachers has meant that they are demanded for senior educational posts in other schools. In this way changes developed at Tyk can be diffused elsewhere. As far as the parents are concerned it is interesting to note that the new methods have served to distance many of them from the school, as, despite their knowledge and interest, they are in no position to evaluate or assist the most modern methods in, say, mathematics or modern languages.

It is clear, therefore, that Tapiolan Yhteiskoulu is one of the leading innovative educational establishments in Finland. It has achieved that position partly as a result of the charismatic qualities of initiative and leadership demonstrated by a few individuals amongst whom Mr. Urpo Ratia is the foremost. By careful control and direction he and his associates have been responsible for organising administrative structures and recruiting individual teachers so that their ideas about educational change could be introduced. As has been shown, in this generally favourable context, flexibility, team teaching, individualisation and the production of resources have flourished. There have, of course, been restrictions and constraints upon innovative activities. Moreover, unintended consequences have been the results of certain achievements. Nevertheless, Tapiolan Yhteiskoulu remains a school distinguished by its innovative activities and one which is in a position to continue to develop new ideas throughout the 1970s.

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